

these substances be admitted into the new mouth  
mixed with saliva & absorbed - This is no likely the  
by the lungs - If admitted that any part absorbs all  
must - ~~quod~~ minus probat, nihil probat - Admits  
the capacity of the experimenter in every respect &  
still not able to detect the substances - Does not say  
that all substances are admitted - Question still  
remains How do madder & rhubarb enter the system  
& not others? They admit this & still deny cutaneous ab-  
sorption - Why did they limit their enquiry to the skin  
of the blood alone - Their effect at best negative -  
Facts have been inadequate & needs better experiments to  
prove this - All substances clapped 3. p.m. Kingdoms  
Mod Operandi of mind must act by the little prin-  
ciple acting on them - Admits sympathy in many cases  
but not in all -

Psychiat. Mad - must conf a case of disease -  
To what cause is it owing that during 30 <sup>centuries</sup> ~~years~~ no  
correct catalogue of mind has been constructed? Could we  
confide sufficiently to a Diabetic plan - This dist  
of more consequence - The really useful articles are  
few in number & very few in the 40 sub-  
-





Dr. Gibbon

15

How are wounds divided? What is the char of  
arterial wounds? Can no bleeding - also common  
to Lacerated Wounds - What is of the punctured  
wounds? Can they stand with danger? What is danger  
of tetanus coming to? Lymph - What is of undest  
the penetrat wound? Give an example? What is  
their danger? Is it deep & open large wound? Incised  
wounds? What is danger? Lacerated? What is the  
danger in Lacer? Surgery - What is Union - 1. Int  
What is suture? Enumerate differ suture? What is dry  
suture? How is the twisted suture made? Where  
necessary? Where interrupted? What is frequently  
suture & Twisted? What is the Continued Suture or  
Lover's hair suture.

General Treatment of Wounds -

Continued suture - Treat as on circumstances -  
when robust danger of gangrene & by fall - Sh. give  
stimulants & nourishing diet - apt to affect the  
nervous system - Where no concussion - W & Anti  
phlogistic regimen - Where matter forms sh.  
be promoted - & evacuated by small opening - Two per  
points to be attended to - Pus & inflam - & then can

Punctured wounds difficult of cure - 1<sup>st</sup> object  
to remove extraneous body if practicable - sometimes  
very deep - Should endeavor to extract w<sup>th</sup> matter  
suppurat sh<sup>d</sup> be encouraged - If not opened - may  
proceed to - Sometimes must use tents - to  
prevent healing & orifice - Sponge kept in wound  
a few hours -

Penetrating wounds allied to punctured &  
occasion an inflam<sup>n</sup> - fire in vital parts -  
if large vessels sh<sup>d</sup> be laid open & the depth  
when in delicate parts extra<sup>r</sup> takes place -  
more apt to run into supp<sup>n</sup> th<sup>n</sup> Pus -  
Lacerated - Similar to contused - sh<sup>d</sup> be  
endeavor to prevent gangrene & not irritated  
stimulants at first - & after depletion if infl<sup>n</sup>  
sh<sup>d</sup> be kept in contact by adhesive strips  
or suture - When adhesion do<sup>e</sup>s take place sh<sup>d</sup> be  
cut out away the ligatures as advised by J. Ke<sup>l</sup>  
May take place by suppuration & granulation -  
In all great operations flaps sh<sup>d</sup> be kept by ad<sup>n</sup>  
adhesive strips - Bell thinks it is a safe thing  
adhesive inflammation -



Dr. Cope, Monday, Nov. 15<sup>th</sup> 1879. Lecture 5<sup>th</sup>  
Solidity & fluidity are only relative terms, & the in-  
finite particles of all matter are solid - Endoosmosis  
from the vitality of the blood. Red blood amounts to about  
15 Pounds - & such a quantity c<sup>d</sup> not be dead matter. It is  
changed by changes in diet as odour of milk &c. & substances  
exist in it at one time which do not at another -  
Iron does lime & phosph<sup>r</sup> - reaches its destination if not by the  
circulation - these articles are taken as medicine - others as nour-  
ishment - now these must be taken into the circulation  
- else would not be nourishment. Gun Arabic - Sympathy  
an action from local impression - & explains many phe-  
nomena, but not all - It is inapplicable - <sup>the</sup> vegetables <sup>are</sup> composed  
of the same ingred<sup>s</sup> only in diff<sup>r</sup> proportions - Big Salaf & Spe-  
cimens, & it must be the vital principle acting on them  
not their impression alone - Do remedies ever induce this  
effect by entering into the circulation? <sup>the</sup> vitality <sup>of the blood</sup> is indi-  
cated by the different changes it undergoes in diseases - con-  
stating in some & dissolving in others - Scrofula in Rheumatism  
& dissolves in Malignant Fever? What then produces these chan-  
ges? Blood must be organized no matter how absurd it ap-  
pear - Solidity not essential to organization - Nerves are

He says are not essential to organization - Ultimate parts  
of all fluids are solids - & only differ in their cohesion -  
Comparing muscles or vitreous humour with bone they w<sup>d</sup>  
appear relatively fluid - The gases <sup>are</sup> also analogous oxygen  
being much heavier than hydrogen - only relative -  
Blood contains globules more solid as they sink in the  
other parts - these globules must be alive or organized, <sup>for we</sup> cannot  
reason on the score of magnitude alone - the Egg - fluid  
organization - The action of diseases on it, is dependant on  
its peculiar organization & can only be explained in this  
way - It is to s<sup>t</sup> that the blood has no nerves - but they are  
not essential to organization - Nerves formed - blood.  
Numerous principles must enter the circulation or s<sup>t</sup> not  
become organized - Quarts in teeth - Phosphate of lime -  
bones - Sulphur must be compound as it is found in the  
system & not taken in by the mouth. Boyle says <sup>the</sup> body is  
not a mere statue, but composed of numerous different  
substances & changes take place by their action - What  
proof have we that because we do not find substances  
on analysis which have been taken in, that they do  
not exist in some state or other - Different analyses  
afford different results & can not be considered as perfect.



Neither is it proven that any article we give is efficient  
 & state we give it - But may be owing to some of its in-  
 dividual parts, viz Nitre &c. - By taking nitre for a consider-  
 able time it will be found in the urine & therefore must  
 either be carried whole into the circulation or recombined  
 from its constituent principles - We do not know how small  
 pox operates - Children born <sup>with</sup> small pox must be contaminated  
 by the circulation - It is sd that med or subst injected  
 & bloodvessels produce death - I shall simply state facts -  
 We ought to rely on the experiments of Boerhaave & such men -  
 Both sides may be right in the experiments by <sup>their</sup> deductions must  
 have been erroneous - Death does not always ensue from  
 injecting substances into the bloodvessels - It? is rely -  
 experiments of persons unaccustomed to them - & our deduc-  
 tions are too generally drawn from such sources - That  
 blood is changed is proven by Hippocrates in foetus - & my  
 own child made drunk from sucking milk - Drunken  
 nurse - If blood ~~for~~ death is produced when substances  
 injected & the blood, it do not prove that it is so when  
 they enter by the lacteals - here it is diluted by the chyle &  
 enters slowly the subclavian vein - the cases are dis-  
 tinctly different - No analogy & deductions must fallacious

differs to detect subst in the blood is only a negative character - One positive effacement of more value - We cannot detect ~~the principles of~~ vegetables in the blood except <sup>only their ultimate principles</sup> (which are similar in all).  
 Dr. Gibson -

~~When is gangrene?~~ When but little blood need to be or best local - 2 mds. Scarf & leeches - leeches best except when leeches c n be used - as Aberration - In irritable persons also c n be used - Leeches s b app on the affected part - Hunter thinks in all cases where practicable Local is to be used - Dr. Gibson thinks general is given as efficient. & cure - Aberration stage - Antiphlogistic regime - 2d treatment of Suppuration - 1st keep up the action - part - Heat sh<sup>d</sup> be applied - given done by foment. steam & foment. which increase action & prevent suppuration - Heat with proportion & degree of inflam - sh<sup>d</sup> be given to the infl part. Dry lint - When suppur is indur sh<sup>d</sup> prevent it from going too far. Confined part produces v b consequences - cancer, sinus &c. Treatment of Ulcerative Inflam - viz Healthy - 2 things in view - 1st Not carried too far - 2d Not to let the In mild cases include air - moist ointment - red lint. w calamine - Prepare by band or roller - of cotton & other Plasters - not suitable to every case - When want of action



Dry lint & increased pressure - When indolent Charolice  
Treatment of Hectic Fever. Sh<sup>d</sup> 1<sup>st</sup> beats the only disease -  
When extends Ulcer, amputation - When c. n. b. runs by itself  
Sh<sup>d</sup> resort to Constant remedy - Bark wine, remove - country -  
Diet rich & nourishing - Exercise Horse or carriage -  
Sh<sup>d</sup> Check sweat - acids usef. Prevent Decubitus  
Treatment of Gangrene or Sphacelus - active remedies -  
Sh<sup>d</sup> also possess stimulant & tonic power - Bark appears to  
possess a specif effect - Suffer in dry gangrene - I. Bark  
wine & aromatics - Powdered bark best - Sulph acid -  
also external applic - Decort of Oak Bark preferable -  
Wine gums not usef. Sh<sup>d</sup> be appl - sound parts -  
Scarf to be advised - but not in use fit, too stimulating -  
Sh<sup>d</sup> prevent effusion of irritating fluids as urine -  
Local applic - Best Blisters - Potatoes - cannot & yeast - Charolice  
not very usef. In some cases amputation to be resorted to,  
but erroneous -

Treatment of Dry Gangrene - No settled plan - Amputation  
only resource -

Treatment of Pott's Gangrene - None of us advantage - Gain  
only serviceable according to Pott - D. P. thinks need un-  
availing. Blisters cured in one case - Dorsey -

6<sup>th</sup> Study diligently Mr. Hunter.

Dr. Hare Monday, 12 o'clock, Dec 15<sup>th</sup> 1819.

Sulphur <sup>or Chlorate</sup> <sup>or</sup> ~~Uranate~~ of Potash - <sup>the</sup> fulminating powder.

Used in guns instead of gun powder. Superior against  
of fluids makes them preferable for thermometers.

Sanatorium 1<sup>st</sup> varies in proportion to atmospheric pressure.  
Mercury best - Alcohol less accurate. The expansion of  
mercury most equal - Construction of the thermometer.

For temperatures below thirty nine we must employ  
thermometers of alcohol - Differential thermometers of Leslie.

Dr. De Butts variety - straight tube with a bulb at each  
end. Atmospheric pressure sh<sup>d</sup> be well understood to  
explain many chemical phenomena.

The pressure of any fluid is the same in all direc-  
tions - & the equilibrium is the effect of pressure -  
Efficient This is the fundamental principle of hydrostatics.

Dr. Horner vs Dr. James Monday 3<sup>rd</sup> o'clock.

On the organs of generation -



Dr Cox. Tuesday, November 18<sup>th</sup> 1849. 9 o'clock. 7

Facts which prove the admission of substances into the circulation without proving fatal - both by injection & the lacteals. Beginning with the chyle - Dr Martin Lister 100 yrs ago found blue chyle in the lacteals - Confirmed by Musgrave - Indigo gives chyle a blue colour, but a madder, red - Substances when given as medicines are administered only in minute doses & so more readily received into the lacteals than when in large doses they <sup>are</sup> rejected by experimenters - Ventricles <sup>expand</sup> 2ij in one contraction - or 40 lbs in human substance in water so minutely that it is unappreciable by our tests - Cannot accumulate as they pass out of the circulation We also per after a serum, & why are the matters attracted to the other parts - iron & globules - Madder colours the bones & if c. is detected a circulation - Many plants apparently possessing no colour may develop a colour in their different chemical changes - These chemical tests are inefficaciously to detect subst & circul - & only negative - Is life destroyed by injecting subst & blood vessels - For example injected oil of vitriol - dog since death - Fabricius & Haller - wine of iron, purgatives, emetics & so inject: since death - Sir L. Broun injected colchicum with good effect - vinegar, sugar of iron - Zips salt - Spht wine produced drunkenness - Salt of U. vine - Decast of serum, bile, repeated with similar results

Dr. Sydenham's experiments also prove that death is not  
 from injecting blood into circulation - John Hunter M.D.  
 Lectures - Experiments - Salt injected Borax - vinegar - Sulphur  
 no permanent effects - Sol. of Opium convulsions - Pin just re-  
 laxation, 3<sup>rd</sup> Laurel Water recovered - Only continue as long  
 as the cause remains - Specac - Salaf - purged - Rhei.  
 Aether & vinegar death - N. Acid, is fatal - Pin fatal -  
 Extraneous matter does not kill - J. Hunter says that it is  
 most probable that the blood is first affected with disease &  
 then the solids - I see agree - Must credit such testimony -  
 Many articles affect the solids - garlic, saffron, madder, &  
 Children salvaged, & filthy taste of birds, these articles in  
 their efficient form not to be conveyed into the circulation  
 & decompose or the co-<sup>or</sup> produce their effects - Chem-  
 ical changes could <sup>not</sup> produce these results - In the Urine  
 smell serpentine, indian fig red, Sir B. Home & others.  
 Haller - Mercury is s.<sup>d</sup> to have been detected in its me-  
 tallic form - <sup>Gold impurities in</sup> serum & salivae - If it is not detected does  
 not argue that it does not exist. I consider metals as having  
 a compound nature, & for this reason we do not find  
 them in their metallic state - Van Helmont fed a plant  
 on distilled water, & discoloured iron - Now this iron must



to be found in the vegetable - & Cope infers that iron oxides  
are compound. Linnæus states from Castells that  $\frac{3}{4}$  of  
mercury or  $\frac{1}{2}$  in basii Cranium - Ancient Authors men-  
tion many cases - Paracelsus, Donatus, Heller, Peter Potter, Præsius  
Cruzius, Phil. Strauss - found mercury in vesicles on the skin, Van  
Swieten also. Boerhaave can not be opposed by ridicule -  
The discovery of scum like a flock of sheep - not Boerhaave  
but Lennéhoek.

D. Gibbon -

On Wounds - Divided by Writers in several species -

Contused Wounds - Cannon balls & falls &c. - No injuries to the  
bones - Effects more permanent - when not gangrenous - deep seated ex-  
position & carries a bone apt to follow - B. Hall -

Punctured Wounds - Dangerous according to their situation - appear to  
affect the lymphatics -

Penetrating Wounds - different in being extensive openings - Whom  
- sword or bayonet - more dangerous -

Lacerated Wounds - Choking - Pen no hemorrhage -

Lacerated Wounds - Not dangerous - Hemorrhage -

Union a first Intention - a wound in b. h. - same means  
Tallincoth's, Casper. Torment - Sutures & Bandages - Neesha  
means - Dry Sutures <sup>by</sup> Adhesive Plaster - Strips the best - Pouch -

Dry Sutures most preferable - Sutures Cruciate - Made by needles &c - Divided into different kinds - Twisted Sutures made by steel pins as in Hair lip. Needles alone will do. Continued Suture - Pins not used - also called Flower's Suture - also restricted Suture - Interrupted Sutures - Best for most wounds - Quilted Suture - Useful in Wounds - Abdomen -

. Dr. Hare - Tuesday Nov 16<sup>th</sup> 1849 -

Proving the equality of pressure. ~~By just so much as the~~ heights of different fluids by atmospheric pressure are inversely as their specific gravity. Experiment - Pressure of water on mercury inversely as the weight of the latter -

Atmospheric air 840 times lighter than water -

Dr. Langer - Wednesday 3 1/2 o'clock - Nov. 17<sup>th</sup> 1849 -

On the passage of the foetus head - Pelvis - Brim, outlet, & having difficult per occurs in passing thro' the brim - Size of Pelvis - from the Sacro - Iliac Spine <sup>long diam</sup> - Acet:  $5\frac{1}{8}$  - Transverse  $5\frac{1}{4}$  - Antero - Post  $4\frac{1}{2}$  inches - Diam & Outlet from one ischium & other <sup>4</sup> - Long & inferiorly & point & covers & arch Pubis 4 inches in width & 11 in Anteriorly 5 inches - Separation of bones & pubis not frequent - Only natural & forcible fig. Bandage only necess. when sep this place - Size & foetal head - Sutures - joint.



anterior fontanelles 4 angles & 4 sutures  
in sagittal & coronal Sutures - Posterior fontanelles - suture  
no form but only 3 lines or sutures - formed in occipit & parietal  
bones - Diameters - Long - & forehead & occiput - 4 inches - Oblique  
& vertex & chin - 5 inches, Diff: Labour 5 - Transverse - 3 1/2 3/4  
from one parietal prot & another - Perpendicular: 3 1/4 - 3 1/2 inches

Different Presentations - Sin & Old - Brachela  
six divisions - 1<sup>st</sup> Presentation takes place 7/8 <sup>lines</sup> <sup>in</sup> <sup>the</sup> <sup>bone</sup> - 2<sup>nd</sup> -  
3<sup>rd</sup>, 4<sup>th</sup> & 12000 - 4<sup>th</sup> more common than the 3<sup>rd</sup> but once in 100 times  
& 1<sup>st</sup> & 2<sup>nd</sup> - 6<sup>th</sup> is diff & most rare - but once in 12000, in-fer  
requires instruments - & still born - In many cases can be  
labour 5 or 6 hours by converting the 4 & 5 pos & 1 & 2.

Apex - 2 - 1<sup>st</sup> & Super Strait - from the Umb - a part & coccyx  
through the center & pelvis - 7<sup>th</sup> alw appl the forceps in the  
Elexis & outlet - From the 2<sup>nd</sup> Bone & Sacrum - a Sympt. Pub  
Deformity from Rickets & Malacosteon -

D. Cox - Thurs Day, 9 O'clock - Nov. 18<sup>th</sup> 1849 -

2 Plans on which need act & the Abdomen & Skin  
Must be connected with Bone - & Lungs w the Skin -  
their analogy is proven by their peculiar circula: Skin &  
Kidneys interchange functions - precise balance & system  
Skin & stomach sympathize - cold water in coughing -  
Natives in common except balance - Stomach with Skin

I skin with the stomach - as fast as food enters  
 we regard as continuous function - The  
 Sympathetic Act is no longer when used not properly  
 Alkalies, Wine, Gum, Stimulants & operate immediately  
 their ultimate effects are to reduce sleep & in looking  
 ing to absorption - their stimulant action sympathetic  
 think mercury acts by exciting the circulation & in  
 sympathy - the skin <sup>continues</sup> properly the only surface on which  
 which used act - On Cutaneous Absorption - Think  
 absorption takes place as well from the skin as from  
 the intest from the lactals - a proof of their identity  
 of surface takes place in small foot measures -  
 Authors recommended nutritious bath - Paracelsus  
 nominated men for several days by the skin  
 Haller also - Boerhaave sweating through the skin inverted  
 Attempt. to show it used enter by the lungs  
 & there they must be taken into the lungs & absor-  
 bents - Can we also allow this to the skin -  
 Theory & Practice are at variance <sup>they</sup> ~~the~~ advice flows  
 in mercurial friction - The removal of inter-  
 nal poisons are not their only use - Does not  
 admit the accuracy of their experiments - Can we



When suppuration is about to be established & P. not cut away  
the lightness as we otherwise expose the surface - May use  
theine straps & when a n. b. bro. together position  
the surface

Incised Wounds - most simple - May use sutures in  
every case but absurd - In Wounds a face & scrotum, need  
interrupted suture best - face - Proper a zig & irreg. wound  
angular. a stick at each end - or deformity to be prod.  
Have lip, <sup>the</sup> commence at the lower edge as deformity is  
produced. P. bring the retracted edges & muscles in  
contact, as contraction or debility w. be induced -

Sutures used in deep muscular wounds, apt  
to induce irritation - Must also attend to the constitution  
Practical Rules - Suppression of Hemorrhage -  
instruments incantations & charms, soft actual cauteries -  
subron Pare 1<sup>st</sup> and Ligatures - Styptics in small wounds  
depend on ligature & sponge - Tenuaculum can only  
be used when the vessel is cut deep - Needle useful when  
the artery a n. b. brought out, & for excluding a portion  
surrounding flesh - Sponge used in deep cavities -  
draw out a n. b. drawn out - Mode of application -  
sutures ought to be cut when sponge is removed -

Torrecellian - only used in the extremities -  
 Substituted a handkerchief with a knot & riddle -  
 when the Torrey's. When needle is used the vessel  
 is fixed in a surround ~~cellular~~ substance - when  
 in the neck must use the finger - when in narrow  
 passages - either stop the orif: or cut down & tie up  
 the artery - When Sparg's is used must attach a lig  
 to extract - apt to render bone caries & sh. is  
 removed when danger of hemorrh. has ceased -  
 when hemorrhage from cells of bone - knead  
 wax into the cavity -

Dr. Hare Thursday Nov. 18<sup>th</sup> 1849. 12 o'clock

Torrecellian vacuum - distinguished from that by  
 the airpump in being more perfect - Prod - by filling  
 a tube with a fluid perfectly & inserting it over  
 the same fluid, <sup>mercury nearly 30 inches</sup> - measures the pressure of the atmos-  
 phere over the whole surface of the globe - This pres-  
 sure influences vitality & all chemical phenom.  
 Proven that when we ascend mountains decrease  
 Mercury 11000 heavier than air - multiplied by  
 30 gives the height of the atmosphere - Pressure is  
 about 15 pounds on every inch square inch -



19  
Exp - bursting bladder by atmospheric pressure - The  
action of the common water pump is in consequence  
of the atmospheric pressure - Water rises 30 feet -

Exp - common <sup>water</sup> pump - cannot entirely draw out the  
water because the tube does not extend to the bottom -

Exp - Air pump - any portion of air left in a vessel ac-  
companies every portion of vessel, while water only the  
bottom - bladder -

Exp - Pump Elastic Bottle enlarged - Experiment - Pump elastic  
bottle filled with air sinks in water at the common  
pressure & when pressure is removed rises - Fish analogy  
Elasticity in common acceptance means the property  
by which a body returns to its original state after  
extension - I wish you to understand it in this way -  
Consider air in an compressed state of compression  
from surrounding substances - I explain when these  
are removed & w. fill all space - He then explained the  
Construction of the Air Pump - Experiment - forcing air  
through wood - Caloric is the antagonist of Atmospheric  
pressure - may produce expansion either by reducing  
pressure or adding an additional quantity of heat -  
Experiment - Converting vapour into fluid or liquid by abate

<sup>20</sup> Phenomena of Ebullition - Experiment - Heating water  
under a cover - ascends & descends - Boiling point influen-  
ced by atmospheric pressure - & sh<sup>d</sup> ascertain the Baromet-  
rical pressure - varies from 27 - 30 - & sh<sup>d</sup> attend to it  
in constructing the Thermometer - Explained the fluidity  
of Aether - Chemical affinity only exercised at insensible  
distances - Evaporation different from ebullition -  
Evaporation owing to the affinity of the atmosphere for  
the particles of the fluid -

D. Case Friday Nov. 19<sup>th</sup> 1819. 9 o'clock A.M.

He endeavours to abolish the idea of extraneous matter  
& contains absorption now from the abolition of the  
Hemorrhoidal Pathology - Preliminary steps to the intro-  
duction of Medicines - & differ Means - First, their  
sensible qualities - smell taste &c. but can not al-  
ways rely on them - Collier's observation - that insipid,  
possesses no medicinal property, this is not correct - How  
little the smell of Cinchona, gamboge, Jalap &c.  
What taste Colomet &c. does not depend on taste & smell  
of so rancid matter & putrid, most powerful - Nor on  
colour - must therefore rely on them - Secondly,  
Potential Affinities - In particular instances useful



But generally not proper - ~~Solanum Dulcamara~~ and  
 poppy, peach, perry apple - Cannot be applied to ascer-  
 tain their properties - Must be compared with their  
 sensible qualities & rational experiment - In our

3. Chemical Examinations & we sometimes derive ad-  
 vantage - this has purged the Materia Medica of many  
 substances - Can not afford a certain clue, but acquaints  
 us in what parts the active qualities reside & separate  
 them from others - <sup>Has enabled us to perfect the preparation of medicines</sup> By it alone we can not substantiate  
 the virtues of a medicine - Many are poisonous to man  
 which is fatal to brutes - Simply chemistry unimprovable

4. Experience is the principle test & apart from it we  
 can say a priori what are the virtues of substances -

Shd. be founded on actual experiment in human body -  
<sup>animals but not safe as may be poisonous to human</sup>  
 May first carefully try it on inferior - Experience shd.  
 be added by correct reasoning & reflection - May be con-

sidered into 2 parts - True & false - I<sup>st</sup> shall endeavor  
 to expose their fallacy - 1<sup>st</sup> Amulets & charms still prove  
 that the days of Sir Kenelm Digby not passed by - Events  
 marvellous - Women's linen, women's bite poisonous - Strong  
 tendency to be misled by false appearance - Sir Robt.  
 Boyle is now absent than Smoke storm - Holley

not confined to any age or any part of world.  
 2<sup>o</sup> Precious stones, <sup>pearls & shells</sup> &c - 3<sup>o</sup> Great substances - raw eggs <sup>Jaundice</sup>  
 may have originated from the doctrine of signatures, <sup>as eggs of a yellow colour</sup>  
 Bread pills & Powder of foot is frequently found useful  
 in creating confidence - 4<sup>o</sup> Diseases formerly re-  
 corded no longer exist - Acid & Alkaliescent acathren.  
 spiritus liquor alkalis & acid cathartics &c - If the  
 atrabiles - Vides Cooper's Lecture - 5<sup>o</sup> Where disease is  
 map of blood were the signs it would make no difference whether it  
 present the administration of great medicines proves  
 or, not, but there is some truth in these opinions of the ancients.  
 The source of false experience is 1. Mistaking one dis-  
 ease for another, 2. Supposed to effluvia the healing of broken bones.  
 cure for another - & administering wrong medicine  
 7<sup>o</sup> May arise from mistake of the remedies them-  
 selves - 8<sup>o</sup> Know all the symptoms of the Malaria  
 medicinal. 9<sup>o</sup> Another source of false exp originates  
 in the falsehoods which too often exist in Med. Wri-  
 tings. - 10<sup>o</sup> Every day since from this - 11<sup>o</sup> To be lamented - Having pointed false exp  
 in show in what true experience consists.  
 Recap. - Must be sceptical as to the introduction of  
 new medicines & virtues for exaggerated - 12<sup>o</sup> not  
 always ascribe the cure to the medicine, as nature  
 frequently cures without - Other circumstances may  
 produce effects which we attribute to medicines  
 as cold &c



Wounds of the Scalp. - Punctured wounds few occur -  
 Erysipelas Inflan - Pott's destruction appeared -  
 Fever, but little danger, but violent nervous irritation re-  
 curre - H<sup>d</sup> lay open the scalp & bone - When brain is in-  
 jured the symptoms are more intense & urgent - Skull &  
 pericranium separate in this case but not in the former  
 dangerous as if freq. fatal.

Contused ~~head~~ wounds of the scalp - Less dangerous -  
 Less extravasation exists - Where extravasation small soon  
 absorbed, where great the bone is apt to be destroyed -  
 Case Harrell - Extr & under the scalp - bone absorbed -  
 granulations from the dura mater & Leucis - Case by Hill  
 owing to pulling the hair - rare - Children more liable to  
 the formation of tumors by extravasation - Sometimes res-  
 embles fracture & bone - partic: if stupor & vomiting - In  
 scalp alone the stupor not so urgent - & continues none at all  
 Treatment of blood tumors - resorbs - When it remains  
 a great while dangerous to the bone - H<sup>d</sup> evacuate the  
 blood - Lacerated wounds - not dangerous unless  
 bone injured - Recent treatment, scalping - La Motte 1<sup>st</sup>  
 abolished it - Obese & mod say is to procure adhesion

24  
Incised & Lacerated wounds in many insts. held together  
Opium. Differ as to holding them together - Some  
sticks & others adhesive plaster. Case Sir J. Esq. - When  
sticks used recovered - Thinks more hazardous results from  
sticks in the scalp, but sh<sup>d</sup> not prevent their use  
if used in use so many sticks - Sh<sup>d</sup> be used -  
Angles & Wounds - by Interrupted & Suture - When union  
is not accomplished & matter issues out & disch -  
by puncture - In all wounds 1<sup>st</sup> Object - To procure Adhesion  
or cohesion in every case - Bring together by adhesive  
strips & bandages & if not by sticks - Sometimes violent  
symptoms arise - putrid funicular wounds - Pouch -  
Contaminated wounds - Death - Pott's relates many cases -  
Case; blow from a chain recovered, after Hypospadias -  
Cord of sperm. relieved by opening the sculp. - Dr. Physick's plan  
when deep seated pain after injuries of the scalp. Divides  
the scalp down to the bone - vide Dorsey - Quercus -

Wounds of the Face - In simple wounds - good  
sutures - Wounds - Salivary Ducts most troublesome -  
vide Dorsey - When we cannot obliterate the orifice  
a duct into the mouth, we must destroy the  
duct -



25

D. Howe Friday Nov 19<sup>th</sup> 1829.

Gravity of the coin is in exact proportion to the thickness

Experiment - Column of mercury diminishing the bulk of atmospheric air - The effect of atmospheric pressure is the inverse of heat. Diminution of pressure or the increase of temperature affects the bulk or increase of gases -

Experiment - Aether passing up mercury when vaporized  
Expt. Pressure of Steam - ~~30~~ 212 degrees hotter  
than boiling water supports a column of mercury equal  
to the pressure of the Atmosphere - Three Ovals express equal  
to the pressure of 30 Atmospheres - Ebullition is the escape of the  
vapour of a fluid produced by heat or aqueous gas passing  
thru: When the pressure is increased the ebullition ceases  
& the boiling point raised - ~~Expt~~ Geologic Phenomena -

Court Rumford <sup>says the</sup> water in Rumford is equal to pressure of 800,000 lbs in a square inch - Eff. Heating water & diminishing pressure boiling a substitution takes place - Eff -

Freezing water by evaporating ether in an airpump -  
Atmospheric air in its chemical operation aids ballis-  
tion & in its mechanical operation prevents or retards it.

Strengthening center by ether is the converse of producing  
fine in a condenser - Presence of the infl matter <sup>an</sup> ~~is~~ <sup>is</sup> ~~is~~

26 The production of cold by evaporation not confined  
to ether but applicable to all substances & in  
this way accounts for cold in winter. Owing to  
the power of depositing moisture which the wind possesses  
& water even deposits ice. Some substances become  
solidified without passing thro' the intermediate  
state of fusion, as Camphor &c. East Indians  
produce ice by evaporation. When air is rendered  
more rare <sup>it</sup> ceases to hold in solution so much cold  
vapour.

D. James Friday 19<sup>th</sup> 1819.

Of the diseases of the Parts of Generation. Syphilitic kind.  
We have in parts imperfectly formed & naturally formed  
Elongation of the ~~Syphilitic~~ sometimes owing to syphilitic  
tumors. Nature & Treatment.

Elephantiasis - false to generation when previous to puberty  
& when later in life lose the power of procreation.  
In female breasts wasted & no areolae. Sometimes ne-  
cessary to extirpate the Labia & Nymphae - not much dan-  
ger of hemorrhage. Dr. Hartshorn extirpated Labia very  
much enlarged 11 Pounds - 3<sup>d</sup> Day after the operation  
ulcer symptoms appearing were dispersed by cure.



tie potash to the spine -  
Redematous swellings of the Labia - often troublesome  
fractures sh<sup>d</sup> be made to evacuate the water - more  
usual in advanced pregnancy - Sometimes subsequent to  
delivery - Can tumor a labia similar to child's head -  
Cohesion of the Labia sometimes takes place in infants - not  
of much consequence if the urine c<sup>d</sup> be evacuated in children  
Ullary is generally divided by fissure on the inside -  
Inflammation & Suppuration - Labia - causes cold  
difficult Labours - Sympt. Pain tenderness - soon suppur-  
ates - at 1<sup>st</sup> vs. & Antiphlog - L. vs. by leeches, Opium  
rued & vegetable Diet. Opium - Sol: Acet: of lead through  
the cure - When suppurates evacuate by small puncture -  
Peridural Herpes - between the ischium & vagina -  
from T bandage -

Some anomalous & sympathetic diseases -  
Mortification of the ~~vagina~~ Peridural D. Percival -  
occurs gen between 1<sup>st</sup> & 6<sup>th</sup> years - Treatment - Open the  
bowels - Parts washed with Acetate of lead - & lead poultices  
Bark in Decoct: Colomb: when ulceration has commenced -  
Ung. ofy: Plomb: when ulceration diminished -  
Thinks this disease sometimes mistaken for carcinoma

28  
of violence - Laceration of the Perineum -  
sh. tend to first ~~say~~ - various in direction & extent -  
Rare to quadrupads - Most frequent to circle -  
Causes - 1 Increased tenderness - skin 2 & Position  
during labour - when on the side most frequent 3 & As-  
tering labour - 4. Erection - Patient herself - sh?  
support the perineum. Dr. Deamian says occurs from  
interference -

Enlargement of the Clitoris - Sometimes very large at  
birth - Disting. - males - no testicles - no urethra -  
in the flans - c b felt posteriorly - Case by Brande -  
In some cases organs of generation entirely want-  
ing. resemble the external parts & outer portion of  
the bladder - cut away -

Enlarged cancerous affection of the Clitoris - One  
in Burns strip - Knife, no cases in this country. P

Dr. Physick Friday Nov. 29<sup>th</sup> 1819 -

Remembered that polypi of the nose always originates from  
the inferior turbinated bone, & sh? always apply the ligature in  
that direction & not towards the Septum narium - Instead of com-  
pressing the neck after fixing the wire round it & through the  
canal, he forcibly tears it away & by that means frequently



brings off with the polypus a small piece of carious bone, the  
cause of the disease -

D. Cox Monday November 22<sup>d</sup> 1844 -

" True Experiences - by the which real prop-  
ties ascertained - Experience is the touchstone  
of truth. & it be widely diffused. Idiosyncrasies  
difference of sex, climate &c must be studied -  
Can only draw conclusions by cautious steps -

1. Idiosyncrasy - implies a peculiarity of con-  
stitution - As poison virus &c - Many persons  
are affected differently - proves that the living sys-  
tem is the active agent & acts on dead matter -  
Analogous to a jack which can only move by fran-  
tizing power - & chemical changes by Chem action  
& so with vital action - Why are persons affected  
by peculiar odours, tastes &c - if not owing to pec. act.  
Idiosyncrasies not peculiar to families & might  
& nations - Swift bronchitis - Piles, Pleurisy,  
2. Only a change of System will be a change  
in the effects of medicines - Infants, old age -  
3. Divers. of Sex. It? study the pecul. of sex -  
4. <sup>64</sup> Temperaments - Peculiar temperaments

Subjects persons to special Diseases  
 5<sup>th</sup> of Habit - has great effect. & is imp  
 to be attended to - but abuses small dose  
 when can take large ones - Corrosive Subl.  
 3j can be taken - Opium 3 15 Swell at once  
 Dr. Bouquet in 24 hours in Colic. 100 grs  
 besides 1bij of Ether. Castigation & give the  
 effects of opium in many instances - The  
 6<sup>th</sup> of Season - has powerful influence  
 more fatality in disease at one time than  
 at another. & it<sup>h</sup> be stud -

7<sup>th</sup> of Climate - All study this - & whenever  
 changes residence we find changes

Should therefore study all these things.  
 Nos longa, vita brevis - Hippocrates -

False deductions are to be drawn from this.

Especially is that kind of knowl: we is obtd by  
 long practice without a teacher: & must dep  
 us well as ourselves as on the work proceed  
 out - Med: education or profession - can be  
 obtained by one man alone - No one man  
 can study the operation of all medicines -

No such thing  
 properly speaking  
 as full experience  
 & it is actually what  
 is to be stud -



Let adopt the principles of our preceptors & use  
 their medicines - enumerates them - 9/10<sup>th</sup> of  
 the articles might be disc & still more than  
 sufficient - I shall pass over many articles &  
 if not from respect to other professors sh<sup>d</sup> like  
 it myself to but a small number - In our  
 National Pharmacopoeia sh<sup>d</sup> be independent  
 I think for ourselves & not limit ourselves to  
 indig & contract views - Many articles w<sup>d</sup> be  
 cultivation in this country - Poppy, Rhubarb,  
 Opium, Christl - Others can be cultiv<sup>d</sup> as Bark, <sup>Mercury, &c</sup>  
 All this shows the necessity of industry & ob-  
 servation to a good practitioner - vide Visio  
 of Don ~~Protasio~~ <sup>de Saez</sup> ~~Quacora~~ - I give a ludicrous des-  
 cription of the Physic: upon &c of his time -  
 & concluded with the adage *Plus est at hors de seser*.  
 D. Pibon Monday - 10 o'clock -  
 Wounds - Neck & Adjacent Parts -  
 Are nearly all in put danger owing to infect  
 upon - One apply can - pres - 1<sup>st</sup> Object is to  
 command hemorrhage - Sanuff. sometimes in  
 Most simple wounds - are Incised Wounds -

Sh<sup>d</sup> be instructed  
 foreign Medicine

Great extent of  
 quality & necessity  
 in a Physician.

Gen. suppurated wound, fatal but is so  
 Commonly the superficial thyroid & laryngeal  
 arteries ~~fatal~~ are wounded - not fatal -  
 fainting stops hemorrhage - When hem. is  
 stopped gen. cured. Great nerves owing to con-  
 nection with blood vessels being so near -  
 When recurrent nerves - Aphonia - When  
 below the Larynx, Thyroid gland gen. cut -  
 very dangerous & gen. fatal - Sh. cut down  
 & tie the sup. & inf. Thy. arteries - Coll.  
 Wounds & Trachea & neck Oesophagus - When  
 in the Trachea danger of inflam. & Oesoph.  
 want of food - Elastic catheter - Some say open  
 that wound & Oesoph. nec. fatal owing to  
 arteries being cut - but is so -

Treatment - No benefit from sutures in  
 trachea or larynx - great irritation prod. by wound  
 Sh. be brought together by proper position &  
 muscles & integ. by the interrupted suture  
 In Manicures, Sh. secure the position in the hand.  
 If too far back or forward, equally improper.  
 In Manicures - used a large stock with a hole  
 for dipping - Strict jacket - very successful.



Excessive deformity -

Wounds of the Tongue - join to the teeth - i-  
nvolves or convulsion - Treatment diff - unless  
large no sutures - if deep - interrupted - Petrarch  
machine used in a lady with Epilepsy - Tongue nearly  
divided - Prevented further effects by wedges - Made a  
Circum Bag & fastened by wire curved under the  
chin & by tapes behind the neck - Case - Balt. Willm  
house - Tongue adhered - gums - exposed loose - Requires  
practical experience to proper treatment.

Wounds - Chest - Not nearly fatal - More liable  
to punctures & penetrating wounds - Lungs are exposed  
to injuries - Sometimes do not penetrate the chest - dis-  
covered by discharge of air from the wound - Change of  
position sometimes prevents coarctation - & prod: Emphys-  
ma of the integuments & muscles prod: out em-  
pyema - Stiches less proper - Adhesive plaster & comp-  
Wounds - Ext - Lungs not so dangerous as when  
internally - improve fatal from effusion of blood  
Also with: suppur - & eff of matter & hectic fever  
& death. Hemorrhage a terrible spect when  
he taken up - When into the cavities of the lung - Hef  
etc

{ When anxiety - &c - Sh<sup>d</sup> keep open the W.  
Junction the blood & open it would be  
a knife not practicable - When too high  
Sh<sup>d</sup> be made between the 7<sup>th</sup> & 8<sup>th</sup> true ribs &  
3<sup>rd</sup> & 4<sup>th</sup> false ribs. When from intercost. art.  
can be taken up - sometimes both lungs & L.  
A. wounded & ribs driven into the lungs -  
often fatal, tho' not always so - Can be removed  
no - More dangerous when blood is eff. &  
cells - lungs - & spits blood in streams -  
prod suffocation - Tatiment, copious &  
& quickly repeated, or must die only  
by effusion & ultimate rem. o. b. blood.

D. Have Monday Nov<sup>r</sup> 22<sup>nd</sup> 1819 -  
12 of Oct<sup>r</sup>  
Supposes <sup>entirely</sup> northern ~~water~~ <sup>water</sup> among warm water  
of air in the Gulf of Mexico - As air is raref.  
its capacity for heat is increased & its vapour is pre-  
cipitated - Rain & snow are sources of heat.  
Vapour of water is the constant vehicle of heat  
from the tropics & poles - Why is there so  
great a difference in the climates of Europe  
& America - Owing to there being no land



beyond the 70<sup>th</sup> degree & in the formation of ice much  
alone is given out & equalizes the temperature - Climate of  
Pekin & Phil<sup>a</sup> - The same changes be - Eff<sup>r</sup> - to explain  
the effect of condensation as a moving power - Related to  
the construction of the steam engine - Oliver Evans' high  
pressure engine - Bolton & Watt - When a gas is rarified its  
capacity for heat is increased & it robs the vapour which  
exists in it of its caloric & cold is generated & water pre-  
cipitates - Waulfe has combined both engines - Eff<sup>r</sup> - to  
prove the circulation of heat - Eff<sup>r</sup> -

D. Coxe November 23<sup>rd</sup> 1817 The Day of October  
Should study the Physic properties of Medicines in  
order to become better acquainted with their Medicine P<sup>r</sup>.  
Instances, Carpenter, - The best method to attend for a few  
months in a pharmacy - Many physicians are remarkably  
deficient in the knowledge of medicines - should study Prac-  
tice Pharmacy - An enquiry into the best method of  
Classification - great variation & fluctuation in the  
properties of medicines - Mat. med. is only somewhat  
raw medicine but also <sup>formed by art</sup> prepared & as subspont. vol. 11<sup>th</sup>  
is obtained by distillation from bones - We also possess  
compounds resulting from opposite ingredients -

as neutral salts, &c. - Glauber's salt. Sulph & Pot.

A Methodical Arrangement is extremely useless in every branch of science & practice: a Physician. It w<sup>d</sup> perhaps have been better had no change have been made - The road to knowledge is a circle having no beginning nor end - no matter, where we commence will in time complete the circle - Alphabet, Mineralogy, rendered very difficult owing to the number of names employed for the same subject: Numerous Methodical Arrangem: all merits all defect. - Some to divide the M. M. in 3 Kingdoms Min: veg & Mineral - Others Alphabetical arrangement - only useful in reference - Some articles belong to every class. as mercury - Opium also bel to many class. Various other plans, superfluous to mention. That arrangement best where medicines affect the system in the same way - sanctioned. Articles may be ranged in a 3<sup>d</sup> way Natural History, Medical history & Pharmaceutical History - 1<sup>st</sup> Natural history useful in many cases.



Is however not of much consequence in medicine - 37  
Shall chiefly depend upon Chemical history. Their Medicine  
History can not always be rectified ~~into~~. The ranks of  
Instruments in disease - In this way can discover the  
<sup>the</sup> properties of medicines - & the only be known from  
their effects - been told. The Pharmacological  
History comprehends the various change which oc-  
cur, & its possibility to be - Before proceeding must  
ascertain in what the nature of Diseased Action  
consists - Man procures food from all animals - converts  
substances by digestion to his own growth - If waste  
can <sup>be</sup> be decaying in & when time for derangement  
so it is in the Human body & requires the pre-  
servative principle to restore it - Continually strug-  
gles against the causes of death - Health consists  
in the harmony of the different organs - & derangement  
produces confusion in all & is the object of study in  
the Physicians - All disease consists in disorganization  
or disorder - Nature & Phlegm words, similar - By  
the nature of man the seeds of destruction are  
planted in his frame & when these are no  
longer governed by the vital principle, death is

Disorder must be produced - There must be  
a change in the organization - Disease implies  
disorganization & our remedies serve to restore  
this. Proof is that if healthy action results  
from harmony & healthy organs, disease im-  
plies from disorganization - In dyspepsia  
de-disorganization in the place in the stomach -  
To the eye there is no appearance of disorder - but on-  
ly to our imperfect vision - Even in America  
the first effects will not be perceptible, until af-  
terwards - <sup>as Afflictions de-</sup> From these we are warranted

Disorder  
perfect so  
long as or-  
ganization  
is perfect -

Disorganizing  
action not  
perceptible  
owing to the  
imperfection  
of our senses.

Action is  
in the def-  
inition of  
disorganization -

in the conclusion that no diseased action can  
take place & no disorganization - It is proper  
to state to the disorganization produces  
diseased action being due to  
Healthy action is an agent in contradiction

D. Johnson

Emphysema & Empyema - are in  
the other part - Symptoms of emphysema -  
Caries, 2 + like Bell's Marrow's & Lemper-  
fen collapse except w/ adhesion - Cure  
difficult when long wounds - 2 or 3 methods.  
Purification - Dr. Hunter recommended it - Henry Samp



If they do not succeed must use Paracentesis - May contend for  
the merit - Open the external wound or make a new one - May  
introduce a tube - Bandages useful in mild cases - Double  
H<sup>o</sup>. Roller - round the chest - Only 2 pen: Punctures, Pneu-  
mophrenia - Chest balls - Case Shattered Ribs, Symp-  
toms - Treatment - System supported - Tonics of good diet - to obtain  
activity - When matter collected must resort to operation -  
as low as possible & where it points - Sh<sup>d</sup> not close the opening  
Bougie, Tent, Canula, until matter decreased - When mat-  
ter is immixed through the substance of lungs, much more  
dangerous, few caused by Punctured Wounds - Treat-  
ment - Same tents, some setons - both may be used by a  
judicious surgeon - Sh<sup>d</sup> keep open the wound until ex-  
traneous matter is discharged - Prevent tents entering the lung  
by ligature round it communicating internally - Seton  
is a more doubtful remedy - Sh<sup>d</sup> only be passed through the  
muscles covering the ribs - I

Wounds - Heart & Diaphragm - do not: surg: aid -  
Wounds - Sternum - Trachea - Can be treated by

D. Hanes. Tuesday -

Experiment rarefaction of air in Globe diminishes the weight of atmospheric air - Montgolfier's balloon exemplifies this - Astronauts carry up additional weight to counterbalance the loss of air - Experiment - Effect of steam in producing heat - Refer Henry fig 46 -

of Specific Heat - Bod acquires the common temperature of the medium - Water by weight - Bod. absorb different quantities of caloric & owing to different capacities for heat - Water glass, copper tin - 1000, 187, 60, 22, absorb different quantities - Water 26 times more than mercury by weight - In equal bulk double the quantity of mercury - The same body has not under all circumstances the same capacity - Change when solid & fluid & fluid & gas - owing to increased capacity - Effect Boating water & vap. owing - As the attraction being overcome by heat - Thinks there is a chemical union,

There are 2 modes by which Caloric is conducted - by conducting process & by Circulation - one peculiar to fluids - No two bodies of equal conducting power - Metals are the best conductors - Example Lead



46

Suppose different strata of ~~substances~~ particles - add one particle of heat & it combines w<sup>th</sup> the first particle, add another & it goes to the second. & in the same proportion one particle <sup>of matter</sup> will contain one more particle of heat than another. & when one receives an additional dose it joins with it to the next. & when the capacity is satiated the temperature of all the particles <sup>becomes</sup> equal. There is a mutual attraction & repulsion. Count Rumford objected to the materiality of heat - that in boring a cannon more heat evolved than the metal can contain, but the light of a candle no objection to Newton theory. Atmosphere becomes denser in geometrical progression  $3\frac{1}{2}$  miles is half as dense,  $\frac{1}{4}$  in 7 miles. If the density were equal throughout to that at the earth's surface w<sup>d</sup> be but 5 miles high. Even in the rarest atmosphere <sup>produced in an air pump</sup> the density at the earth's surface w<sup>d</sup> be double. The conducting power is very imperfect implies so that Count Rumford doubted whether the cold conduct heat at all. He observed that when heat was applied to the top of a tube containing a fluid it was not communicated downward according to his experiment. But when to the bottom it was rapidly communicated.

42  
And he inferred that it was only conveyed by the conducting process & that no one particle communicated heat - Difficult to prove the contrary - Observed by Murray by using a vessel of ice - & proved that the caloric did pass down & proves their slow conducting power & principally becomes heated by circulation Mr. Latrobe - water remained cool tho fire continued for many hours to the middle of a tube - Expts. showing ascending the tube - Experiment - Air thermometer under water.

D<sup>r</sup> Coxe Thursday Nov. 28<sup>th</sup> 1819.

No disease can occur from disorganization - Brain divides itself into 2 classes - Executive or Defective action - Must assign it to force by co-ordinated action. Only 3 kinds of action - Vital, Chem. & Elect. Vital power constantly res. other sections. These principles - Habit infl. the off. of mind - as in Convulsion Dublin &c. Can take a few drops of Quinine Altho some detraction as it is noted in by Vital, but in large doses it gives its Chem. Action. The Nature & Parts to which mind are aff.



Med in & taken int store & in the lungs, at  
 Carb: Acids - Tongue since the check & in the  
 Mucous in act & int coat & blood - & wife  
 & the can - In fact wife by pec. habit -  
 Vital mod the wife of Chen & Med upon  
 as dead herself - easily born, who is diff in living  
 In life the princip. of Virtues is add - <sup>exercising power</sup>  
 the fruit: a part is received & used, & the great  
 Thus that quiet - exaltation, & exaltation end off  
 Just end in act on dead matter only by Chen  
 means & disorg.; as is the & not the pl in the living  
 system in be ow to the pec act of Vital - or  
 would act in the same way - Appending the  
 facts and in act end the wife & Virtue from  
 Health is a renew - until organ restored  
 This prove the above act & ex on the time &  
 same system - & rep the open of mind as of a  
 neg nature - & might <sup>the power</sup> deny them power of mind  
 for want of better seen as they  
 Do certainly excite inf. esp. And the, all mind  
 another - but implies excitement & excitement  
 No such the as Sedation - And as a woman

All that can act by their power.  
 Evac. of all the are ult. Res - so are them.  
 Der Princip. That all used w<sup>th</sup> expects any ac-  
 tion in the Stimulant - only sedation by co.

Shall divide into Stimulants & Sedatives - & under the latter all med.

Should attend to dietetics as it is an art  
 in eff. seen in dis. & it can rep. it in  
 diet. - Med. Is it of less import. to be able  
 to prescribe the medicine - We can do just  
 as well - the rich or ourselves neglect the  
 subj. - Can cut large into the consid. of  
 reg. - Is more for rules necess. - & the  
 course of the subj. of diet & regimen dist.

Divis. ~ That - Med. - It is a difficulty  
 to locate medicinal <sup>any</sup> specific classes - Mercury  
 &c - Part Evac<sup>ns</sup> - Em. Cath, & Purgaf. & Mus.  
 It, into the in med. - A great Chapter

Stimulants - & Sedants - & Excitant

Under Sedan - As, Evac<sup>ns</sup>, Cath, Diur, Diaph, Purg<sup>ns</sup>  
 & Demia Phlegmantia



Incertant - into Stimulantia & Nutritional -  
 And: Stimulants - may divide into Stimulants <sup>proper</sup>  
 & Tonics - and the first <sup>or</sup> Stimulants <sup>Stimulants</sup> proper, <sup>Centes</sup>  
 & Narcot, Tonics - Tonics <sup>anthelementes</sup> & Astring -  
 Shall next <sup>anthelementes</sup> Antitithis - & Emmenag - as

\* No one art of  
 proper called  
 Antitithis as will  
 not suit the stone

in such med - No one art truly such  
 as to Antel - entirely, <sup>proper</sup> as per Antitithis  
 Many persons & even Women in health  
 but & we consider them from health - Live in the  
 same light - We say the ear & enter as an  
 eye surface - Worms can take up chyle  
 as they respire & <sup>play intestine</sup> & in the chyle  
 there <sup>read</sup> - Emmenag or suff. <sup>the</sup> in the Caton  
 But for deep & for system - & indic  
 of rel in aff in sea system - At h  
 the Class is uncertain & operates principally  
 upon other parts - Madia, Sencha & Ergos  
 only 3 arts wh L aff be suff to have pec  
 - in equal prop enters other classes -  
 as Cephalalgia, Haemipia, Hepatic - &  
 in the prop, as the Uter is not spent to  
 life - & in open & when the aff - & system

"These accounts  
 are more general  
 in our view  
 than  
 the only thing  
 present makes  
 & that is found  
 in a membrane"

article

It are in so many subdivisions, only perplex.  
 & I could say some ampl suff to end co.  
 First Evacuants <sup>& reg. H. could</sup> - & Com & Heffer  
<sup>under its various subdivisions.</sup>  
 Sedantia, then Stimulantia &  
 then Nutrientia - Then Pharmacy,  
 the Med. Juris prudence -  
 D. Pison -

Wounds ~ Abdomen - Wounds ~ vice - also  
 in way of all Wounds - Ave: could reap-  
 fatal - Air per up - Dagen - exp of Monro -  
 in on l infl to consider - 6 too far - Dr. J. Bell  
 opposed - Air ~ old or ex infl - & in the  
 cell must maintain through - Hunter - de-  
 that air is harmful - Inflammation in day  
 off - prod rapidly - Peritoneal infl: on 6 to 10 days  
 Wounds ~ Stom & intest & also very danger - can  
 to appear in the contents -

Wounds ~ Partic Parts & 1: ~ Stomach  
 Symptoms - Intest Decr - Daily vs - & to  
 get ext - before of Sarter - & suff - by Glysters.  
 - like Le Beau's case - Recumb. post - Wound itself  
 my particular attention - When it comes on rest of



Attach the edges ~ Stomach to the surrounding muscles -  
& cellular membrane - Best method - Not necessary -  
Orthus - soldier - Pelopius carried 2 of his wounds - Seen kind, friends  
of Bohemians - Foucault Hotel de - Can external -

Wounds ~ Intestines are so dangerous ~ a stone & can still be  
interior or no safety - Except a lead at the tip of a small duct  
enter no gen fatal - Symptoms - in cut: much - fear ~ ext wounds  
in Blood visible by the wound - Difficult to ascertain as intestines recede -  
In Contused wounds - Symptoms slow - in 10 days - fear -

Mercurial matter can be raised off of skin - also suppuration  
Can by Litters - Wilsons & wounds, Pained - Torture in both cases -  
Similar - Copious Pus - in 1 of in wounds & intestines - Flood, soft -  
if small, as use of stitches - When large open in still then together  
Different methods - Object is to procure adhesion - & sh<sup>d</sup> be fastened ~  
external wounds & as this closes 10 wks in the intestine -

Whichever divided introd one within the other - & two or 3 stitches - &  
treated a wound after - Although to eat food & then Artificial  
When incision not wanted but only protruded - sh<sup>d</sup> be returned  
at wound & healthy - if operation, ligature, & Knife -

Ligature best by double ligature - Pastor, raphe - Darter <sup>best</sup> & Quilled  
Woundline, Gen: fatal - Lacerated by Litters & all cases as fatal -  
Symptoms as seen at wound - Pain sickness vomit bil blood per

Main & belly fatal - from inf signs - presents Treatment Esplan 18 -  
Cancer -

Wounds - Gall Bladder - also fatal gangrene -

Wounds - Spleen - few fatal - also Pancreas -

Wounds - Kidney is so dangerous - danger fr. eff of urine

Wounds - Wreters is dangerous - as urine blue etc - & other for  
urine - in Wounds - Kidney - as low diet, & antiseptics, if  
if not suppurative - when large vessel wounded & eff - in  
enlarge & etc -

Wounds - Bladder. Very often serious - depends very much  
owing to Position & urine - When urine passes out etc -  
is in danger - Case by Dr. Willison - 18 - London.

D. Hare - Thursday Nov. 26<sup>th</sup> 1844 -  
12 of Capt.

All metals are susceptible of oxidation -

Modification - Atomic theory - is that all bodies  
combine in volume - as to the ratio of their bulk &  
combine by measure - only and not form -

Water exception with the law of expansion by heat - pg 39.

Appearance to be a specific power - & always to preserve  
Aquatic Animals - Temperature & Earth 54°

Radiation of heat - Leslie - best conductors are the  
most ~~conductors~~ radiators - Room is at 1/2 the distance  
of the radius & curvature -



D. James - Thursday Nov 25<sup>th</sup> 1849 - 49

Males may sometimes be mistaken for females by the flaps  
penis being tied down so as to resemble the clitoris.  
Testes resembling the labia - relieved by making an incision  
under the flaps.

Imperforate Hymen. pen. a little to unite tips of Mucosa  
Retent. dec. by it cannot resemble pregnancy - seldom ex-  
tends bef. the Mucosa Urinarius - May also resemble polypus  
or prolapsus - tumor - perineum - gives pain in passing  
feces & secret. excretions - It. make an incision & dis-  
charge the fluid wh. resents mucus - D. Deanna - 4 lbs  
of the loch fluid - It. be kept open by lint - Case Jul 19 -  
new: menstruated, weight, abdomen enlarged - on exam - vagina  
tumor projected bef. the labia - membrane col - vagina -  
fluctuation obscure - Punctate - 2 gals <sup>2 gals</sup> brown fluid  
discharged no fibrine - Cure by Smellie, mistook Hyge as  
for tumor - 2 quarts - Benwold 32 lbs - Sometimes prevents  
connection & cervical incision can be made - Not freq. in the Co  
Pruritus Vulvae or itching - <sup>Inflammatory Discharge</sup> - Subject to Hemorrhoidal wound  
in & frequency very common - sometimes induces fever  
when conception - vs. laxative, sedatives, diet, Pol. Lead  
Blister on pubis - Cures cured by rug scrub.

Case Sol of tobacco - Borax in solution useful -  
 S. Deum - cold water - D. Deep - warm water  
 can be tried in succession - Can all failed until  
 Ptyalism - the fr. irrit - bladder - bougie - Foreign  
 excrescences in the Uterus is a frequent cause & bou-  
 gie almost specific - When owing to insects Ury. Mar  
 or Cal tied up in a rag & dusted - When from  
 Ovarian - Calan or Dolich Pruritus - Hydat of  
 Common salt or oil Turpentine & with inject & bag -  
 Warts - Aqua Ammon & Fe Canth & Iodine &  
 Subacetate of Copper in equal parts & useful <sup>in men also</sup>  
 Lacin Calutic &c - Sometimes Scissors neces-  
 sary - Adhesions & Vagina from Ulceration - sep by incis-  
 ion & sciss - When high up & L. can't be using the  
 Scissors - Narrowness & Vagina, rare, small  
 injections, or sponge sent best - In pregnancy as  
 can be under any apprehension as the parts are always  
 dilated by the fluid in child.

Vagina opening into the Rectum - Pott's - but ask.  
Deficiency or Defect of the Uterus - 2 cases in this  
 city where imperfect - & operation useless - & H. not  
 make incisions too high up -



Protrusion Vagina - in fr wh ext open very large -  
sometimes complete & or when present - Extends 5  
inches from the labia - When long must be band-  
aged & ulceration - Vagina somet very short -

Large tumours - Vagina somet small at the top

Imperforate or Uteri - 2 cases by Morgagni - where  
or Uteri adhered - Chambers - case, when she is sufficed  
of urine, owing to imperforate uterus - weight: 32 pounds.

Best mode is to intro the trochi - towards the fundus  
where - Case by Smellie where imperf: or Uteri, & labour

could not take place <sup>until several incisions were made</sup> - Case by Dr. Cathrall where no

or Uteri & was propelled out of the vagina - w<sup>o</sup> incision &  
child was delivered - The or Uteri was subseq. found & w<sup>o</sup>  
previously owing to Antiversion & w<sup>o</sup> not bro<sup>d</sup> down  
by labour -

Chevalier Case of Imperf Uterus - Women  
lost marriage, pain & no menstruation, virgine Uteri  
was closed - Divided or twice & fluid blood discharged - 8 yrs  
afterwards the same operation w<sup>o</sup> repeated -

Fungous excrescences in Vagina & Uterus - Sometimes  
called polypus - 3 divisions - From the fundus, or cervix  
& or Uteri - generally fleshy - & increases rapidly -

Symptoms - weakness & pain, Leucorrhoea, irritation

in all parts connected w<sup>th</sup> the Uterus. Diff.  
 Leucorrhoea - It is difficult to distinguish between pregnancy -  
 Menstrual flow, or due to an enlargement of the uterus - is irregular.  
 When large - It is removed by forceps or finger & noose with  
 double canula is the best - By the ligature is the  
 best mode. It never uses much force - but is  
 twisted off - When polypus passes into the vagina it  
 is more easily extracted - Does not prevent conception.  
 Case Champier. bore children - Must not mistake  
 polypus for prolapsus uteri - Small be - disting.  
 The Prolaps is dist<sup>ended</sup> & passes over the os uteri - a  
 polypus more irregular - softer & less sensitive.  
 D. Johnson in polypus probe can be passed from  
 the vag into the uterus - In Prolaps bladder displ<sup>aced</sup>  
 in Polypus uterina - Causes peculiar constant  
 Affections - Irritates Urin & Neck - Bladder  
 freezing in diff. labours - & th<sup>at</sup> be watched - When  
 they give way must use Elastic gum catheter - much  
 pain & swell<sup>ing</sup> - which can happen -

Excrescences - Urethra - resemble calculi - when  
 kept up difficult to disting - w<sup>th</sup> the calculi - Ligature  
 & Boagie after extraction - Inversion Urethra



when slight bougie, when great, cut off - no effluvia  
various state in urethra - muf, uterine lot - & bougie

Dr. Core, Friday, November 26<sup>th</sup>, 1879.  
of Sedation.

All subst in be caused stimuli & are only relative  
sedatives - A, H, & C - in some cases -  
Shall write off, in den the exist of Sedatives -  
There are many things wh prod death induced  
I'm & in his whet it stim or not - Effect  
Self Hydrog - Prapic acids is a very powerful  
medicine, obtained from Peach leaves - Formerly  
found fatal as cordial in many instances -

Prapic acid is the  
only sedative if  
any, because that  
little

Hydro, Nit, & Carb, can be put into its comp  
I have is also supports oxygen - But Core thinks  
Hydrogen an acidifying principle - as Iodine,  
Fluorine, Chlorine - Gay Lussac I discoo its base  
a Carburet of <sup>Nitrogen</sup> ~~hydrogen~~ & converts into acid by  
combining with <sup>Hydrogen</sup> ~~oxygen~~, & therefore there is no  
subst of itself an acidifying principle - <sup>P. B.</sup> Affers  
to be entitled to the name of Sedative - Obt & Lar  
no - corrus - peach leaves, bitter almonds - &c - All bod  
in which Nitrogen enters, are powerful substances

or Cyanogen -

Pelletier's Note -  
 formed by adding Vibe Magnesia or Phosphic Acid - but Hydrocyanic  
 red or of Mer-  
 To Proof of Acids - He recommends it in Dis - Chest & Oth. P.  
 Iron - Prof. requires strictest caution as to all poisons -  
 of Mercuric, requires strictest caution as to all poisons -  
 formed which  
 by being heated Exp. 1. Killed & no trace of muscular action  
 in contrast  
 with salph. M. to use in tetanus - When injected, instance  
 of iron - Salph. - It did it operate - blood in blood vessels.  
 of Mercury, formed. At kn as y b little of its medicinal prop.  
 by distillation - May find it use in short dry cough & cold  
 the Phosphic acid  
 could give  
 in - counter-  
 action - with  
 Water -  
 Gay Lussac, of Phosphic acid in 10 grs. in 24 hours - Palladium  
 tained it from  
 Phosphite of  
 Mercury, by  
 adding Mercuric  
 acid, & by  
 passing the vapour  
 through a acid  
 liquid containing  
 Mercuric acid.  
 done of P. & C.  
 2 or 3 grs. increased  
 to 10 or 12 in  
 24 hours -  
 Phobia - Can Poison - Rattlesnake. cure  
 it by giving grs. every 1/2 hour - If then the arm  
 c b give in such cases, 1/2 to 1 gr. Ph. Acid in  
 6 give in Tetanus & Hydrophobia & also Hoop.  
 incough - Places it in Head of the Pedantia.  
 Letter of D. E. D. Smith on the Phosphic Acid -  
 Dr. Smith began administering with grs. iii in  
 24 hours & extended to 10 grs.



Dr. Gibson - Nov. 26<sup>th</sup> 89 - Friday 10<sup>o</sup> AM  
On Gun Shot Wounds - are a sort of Lacer or Contusion  
in prop & veloe, size or shape. Some differ in the  
Manner of Cellula Texture - Some get into a more  
it into a dense one - Mind of a passing ball supposed to produce  
death - doubtful - Not in pain - owing to velocity -  
the destruction of vitality - More death - virtue - When contusion is  
added to incision less pain - When veloe greatest pain least.  
Comparative effects on different parts of body - The course  
& what effects it - seldom direct - per Abige - Red line under  
the skin indicates the course & bullet - Mr. Callah ball did in  
2 parts - Inflamm in G. Mt. Wounds is slow - Sloughing takes  
place - ball forms dead tissue - Disch. at 5 or 6 days - Do it in  
so soon or read as old wounds - Different parts differently  
affected - Want of ripos in front W to infl constitutes the  
peculiarity of these wounds - On the Intestines no fever & wound  
for several days - Very foreign - Happens to other parts - Arteries  
Cause by Chevalier & Hemorrhage & death from Sloughing - Vessels fed  
by the arteries & ball - Luxures & fistulas in face of G. Mt. Wounds  
& Exfoliations - Sometimes lasts during life - Another pec of G.  
G. Wounds are pain & trepidation & sometimes it comes on  
from this commotion - The body recovers - The body goes off

I sometimes diff to cause - being to the shock commu-  
cate a nervous system -

Treatment - 1<sup>st</sup> When first received - & 2<sup>nd</sup>  
of the manner in which the injury is to be treated -  
The 1<sup>st</sup> thing is to suppress Hæmorrhage - is also large -  
should lay open the wound & take it up immediately, the  
not postpone the operation, by tourniquet, as being  
fatal - 2<sup>nd</sup> Cut down boldly & take up the vessel - Next  
thing is rest - If no hem - Must then examine the state  
of limb & the cause & bone - Many reprobate ex-  
amining P. P. wounds - But I think it necessary - &  
shd. not hesitate to cause pain to relieve pain -  
Examination should be not commenced aft the accid.  
as more bruised & in, in pain - The Circ. sh. and  
Exam. necessary in these - 3<sup>rd</sup> When splinter a bone -  
or injury blood vessel - & clots or maddening run -  
wounds - shd. remove them - There must be need  
Exam. & infer when cause & bone is evident - When  
it enters any important cavity, improper, & shd. be  
cautious in<sup>2</sup> examinations - When Exam. is deter-  
mined - the finger is best - of it diff subst - Fract. bone  
det. by spec - Bullet wound & Place Clot - also poss.



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~ Oritories - When beyond the reach of finger - Common  
Gunshot ~~wound~~ probe of fine silver is the best: or  
Urethra wound - Metallic instrument preferable to bayonet  
& vibrator - Hunter says it is improper to dilate wounds  
& puncture P. R. Wound - Dr. Gibson thinks that in every  
wound where extr. body is lodged it is better to remove it  
dilates - Dr. Hare - Alfie - during part - Section

Dr. James Friday 26<sup>th</sup> Nov. 1849 - 3<sup>rd</sup> block -

Leucorrhoea or Fluor albus - common in Uter. Wg.  
Very troublesome, Hysteria, Leucopleg, Dropsy, vitiated appetite  
& Depressed habits. Not Is a visit of mucus or serous  
matter differs from natural discharge & arise from both of the  
Low habits must suspect - Does not proceed from the  
menstrual vessels - Proceeds ~ Lacuna Vaginalis or gland  
structure & uterus - M. Frey - thin men - & uterus -  
Causes Flatulency & Debility - 1<sup>st</sup> full habit good camp  
& clear skin - 2<sup>nd</sup> pale hollow & - Proceeds gradually  
colours in sometimes, attended by excoriation - M. Wane  
one subject - It ~~not~~ is mistaken for gonorrhoea - by  
order urine or to put it in Panar - More slow -  
periodic - Secretion - Vag & Hysteria act on all sides  
without effect - In Debility Tonics & Stim - Kine

58 - Injection, Lead, Alum, Galls - & Spargans  
 passed into the vagina infusing with astring mfgs.  
 Dr. Clark Emulsi bis ut ter hebdomada.

Red oxy Iron  $\text{Zij}$  }  
 Aloes ———  $\text{ʒij}$  } Mft Pil; Ter die -  
 Opium ———  $\text{ʒss}$  } This is given - Alum & Alum

A mercurial course sometimes affectual -  
 Mr. Robertson gives ~~mercurial~~ cantharides -  
 from its use in fleet - Renders it much cheerf.

& mitigates the sense of debility. Checked the diarr in  
 fleet - & tried the Cath in Fluor albus supposes the  
 circumstances precisely similar. began with  $\text{ʒij}$  of  $\text{Zij}$   
 in  $\text{ʒij}$  Aqua - Tule 1 per full ter die - I increased  
 to  $\text{ʒij}$  -  $\text{ʒij}$  Water -

Prolapsus Uteri - vel Procidencia - Distinction  
 one external - the other not - Procid. but - recent  
 an old tumor present external - the or. twice - per  
 Ovar - violent exercise, heavy burthens &c - Much  
 walking - also hasty ex - & Placenta - No liable to W  
 which is very chitior & the weight up too soon -  
 The Uteri acts as a str: matter in vagina & causes  
 Fluor albus - Very incurable since the early stage of  
 Pregnancy - In large pelvis - The or Uteri to be pushed



thro' the Uterus - Being to relax or debilit & Lymph  
Must examine per vaginam - & in an erect posture  
lean over the back & chain - as can in a recumbent post.  
When protrudes when the urine is suppressed -  
When the Uterus is protruded shows its native colour  
& becomes covered with cuticle - & sometimes mistaken  
for hemaphysodite Case - ~~Dr. Lige~~ - Savinard - Home, Phil.  
Brown. When recurrent penis - brief & at times - was  
mistaken for the Urethra - In the Uterus transverse white  
& Penis perpendicular - Hottentots - generally enlarged  
Mymphe - & not a pro - Bochim. -

Treatment - To return the Uter & Vagina Sit.  
& retain them in that situation - Wh. oil. Bals, Cap,  
& Con. diet - When not recumbent use Pessaries - Globular  
ought to be Silver gilt - Used by Physicians & Surgeons - Dr. Hunter  
recommends the Oval pessary - & also thinks the Globular  
is good as any - Oval - ~~the best pessary~~ - Spongy pessary  
has been highly recommended - Sponge is to be cut oval  
& wrapped round w. tape - R<sup>d</sup>. have 2 - & change every week  
It occasions no pain & will expand, flexible & easily  
intro - absorbs secret - & in ultimate supersedes the U.  
Shd. be dipped & moist. w. wax & oil - finer sponge

G.P. Shy to the system - Steel & tonic - cold se.  
 Decret of Black oak bark - continued in cyst.  
 When early in pregnancy not necess to do much as  
 rises after quickening & is cured after delivery -  
 Best Subject - Sulphur Zinci  
 Inversio Uteri - 2 Cases - Weight of Polypus  
 & Pulling - Placenta - Symptoms - Sometimes  
 complete inversion - G.P. also endeavored to return.  
 It has sometimes been cut off by prior incisions -  
 Professor Osander - has perf excis - Uter 9 times w suc.  
 Many cases wh it is imposs to red ~~red~~, it is  
 cut off - But dangerous as bladder is apt to be  
 included in the ligature - Ambrose Pare entitled  
 a first op - Cancer Uteri -

Dr. Case - Monday Nov<sup>r</sup>. 29<sup>th</sup> 1819.

Have had I divided the Materia Medica?

Of Bloodletting - No imp res of  
 evac to syst. The neg act is the  
 re partition in its effects - & more  
 united than Emetics &c - It is the  
 quiescence of evac removed - Sanguis  
 stimulates in excite - Syst can be reg

Is - most honest &  
 gen conclusion -



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Do not know a powerful rem of it be considered - It ext  
its origin -

Has been used  
as a prophyl -  
lactic

as a service instrument - & it vibrates most -  
 May be carried to an incalculable extent - It is the  
 very any records of antiquity - I can't the ascent the  
 causes wh. led to its use - Hippopotamus use  
 it by rubbing of a horn bird - Used in every  
 part of globe & against the cancer - With  
 otter - Sangrado - still remains - D. Phil. Keck  
 ett is the person ridiculed by Le Sage - Sangrado is  
 a doctor since before - It has been used to  
 prevent disease - in Spring to give pleasure -  
 Even the horse & dog govern its use with some  
 originator with some - Allot staying or ill at bed -  
 hidden hypochondriac - Doubtful whether phlebotomy  
 is an aphorism or a use - I suspect - Abstinence is no  
 better - Plethora indicates less hemorrhage - I suspect  
 sometimes used but in most cases - As a  
 Prophylactic is very useful in use of vital parts -  
 begins a brain - Lungs & muscles & Mem  
 or hard tissue - useful & not be used the use  
 in every age - It prepared as in infancy & old  
 age - D. Black did use it & much - & much

May be used  
in every age

be used as well in these stages as in every others.

B in all cases, can be prof & the system.  
Even in few hours.

What is the  
most prom-  
inent effect  
of B.

The in from charact is to red the inod  
ation & system. But can be regulated by the  
judgment & practice. Faintly must ind  
it by a very small loss. & in dep upon the  
quantity can in take the cause. The eff

Does venese-  
ction act as  
a stimulant?  
In affections  
of the 1st & 2nd

is not only momentary, at other parts  
of hour. During this time the exhalants &  
in, even with the blood is retract & fresh  
If dep or debil it is also red blood in  
discharged. W<sup>d</sup> in a p only for this.

The amount of B drawn in to estim  
by diff circumst. A large vs is only a relat  
bern. What is begin 1 w to one in another.

What do you  
mean by abt  
a large quan-  
tity of blood?  
Altogether a  
relative term.

It is also to be prof to open ourselves - as the  
pulse w to be in a less &c. Country pract to  
in the cases the adv. as a choice time & quant.

Does signs result  
in abt a small  
quant of B?  
C is acc for it?  
What is pec-  
or unsymptomatic  
cold sweat

Large quant to be drawn - when we seem to  
in if we wish quantity the right or to.  
Pulse detrs - 6 cotytle or 48 ounces -



D. Phys 175 in 10. D. Dances go y at 100.  
 Prof W. 1020. Is. Every Day & every 10 days for  
 14 months - A Woffen in <sup>the 2 yrs.</sup> 26239th  
 Blood in freq. bl loses its characteristics, loses  
 its coagulated - When bl. is drawn in general  
 it diminishes the morbid act. & it is or  
 over the Parox. & at its commencement -

What is the  
 most proper  
 time for use?  
 D. y never vs  
 and Intermitting  
 Gen. in Chronic.  
 D. y never require  
 it.  
 D. y bl in Con-  
 tinued fever?  
 Why did Cullen  
 avoid by using  
 Symplocos?

In Intermitting the use is freq. but very  
 unf -  
 In Contin fever use it at all times  
 Plebs - Cullen recommends in Synocha - B  
 reprob in Synochus f f or indus debil.  
 But not constant - in fever deb - Cullen  
 & not let the dis induce deb. Even rectus as  
 Stimulants - & the debility c b as easily  
 ven as the fr dis. & the <sup>B</sup> as long as the  
 Puls indicates it - It is the deal plebs system  
 & fully exemplified in yellow fever of 1793 - Every  
 dis or implies in it & is used in all cases -  
 When cases of of general fever vs in receipt  
 it is in left so in Local infl.

D. S. Wilson.

Reasons for Dilating F. S. Wounds - If it proves the  
 the remainder a thigh alone, compare mild - Now if the  
 matter be a small outlet, sinuous will form  
 A fistula - Now if dilated the m. to be disch & it is  
 to be healed for the bottom - May the part room to  
 scalded & red it is nature of an incision - Then pin  
 in to apply to in some cases - The cut or now  
 is fractured - If cut - here other enter or ext with  
 force - This is to be done by dissection & tying the artery.  
 In fractured bone is left necrotic - In all other wounds  
 it is necrotic & ought to be, in this - So long as ext  
 matter remains the wound is not healed - Some recover  
 deferring the extra until suppur & then it is to be  
 "discharged" - 2<sup>d</sup> by making incision or increased incision -  
 In answer, the patient in disch suppur comes on  
 & the foreign body is now also disch by suppur -  
 as granulated short round - In answer - In 2<sup>d</sup> it is to be  
 removed the injury done is but to ext. the matter is  
 not so great as the extraneous matter or prods.  
 Hunter adv. the 1<sup>st</sup>

Of the Manner of Dilating F. S. Wounds -



When not easy we let the mind see thro its  
 whole ext. & we cut w Director & history -  
 Bullet in to ext free & scoop a forefinger - When better  
 lodges - opposite side when we cut down on it & after  
 it - tho' come to Hunter - When ball firmly fixed & also  
 splint it as percer in taking them away - Specula  
 himself as the unit, the ext all we & leave the rest  
 for supposition to disch - Let us recon the Trophine  
 Bait with - or the Scoop & Bullet forefinger of Chevalier -  
 Scoop is far the best - & is like Percy's forefinger -

When we irritate or carried about for any time, swelling  
 being nearly close the orifice & fever & irritation  
 induced - Always we do it through & send turned ring  
 around the orifice - Sometimes when the b m its ext the  
 general diffused redness exists - The orif. vent heals  
 w b intention - In such cases where infl exists  
 improper to ext subst - we red infl & then expose  
 If inflam is only local, & willities to only recede -  
 When few infl or few - Or th? be used - But no  
 disting between infl for a P.S. mind & other kinds -  
 Also when we be to be lost a time & wound, sometimes  
 pulse rises very high, & we be cautious & w dete

bl. - There is a great r. view a few visit which  
us for G. I. Wounds. Treatment During  
Suppuration. Will be mod accord to circ.  
When a st matter on bone is very prof.  
but if st matter, bone, be w b consid.

1<sup>st</sup> Obj is to remove the <sup>causes</sup> ~~causes~~ of supp & sources  
of distress. Remove the Wound. Extra foreign  
matter if possible, in a small incision. Pen-  
etrate easily to extract. In some cases exfol-  
gates in for many years & in trouble without the  
st. ext the matter on bone & keep the wound  
open - nourish food wine & cord. Bark  
& retire a country. When a large Bark is  
helpful. & Care Self & acid inf. & Salts  
of Zinc in small doses. Death but results  
fr. great & long continu irritation & cont  
during life.

If Partic Gun Shot Wounds.

1<sup>st</sup> of the Head. Various - concuss Br. &  
contusion scalp. - But skull is fract, tho' it  
frez on to the shape. Scalp is frequent. Wh  
the b plates w consid bone it is penetr the



brain, & at slow only penetr the scalp - 6<sup>th</sup>

Care taken at commencing - went round the skull  
& under the scalp - Dist by a red line - In these  
cases the symptoms are so violent - unless caused  
shock - or ball exit infl. In Contusions -  
Scalp bl n b eff under the scalp - Distri<sup>ct</sup>  
arises from the subpy infl. & the muscle is  
tied down for rise to great pain swelling & face <sup>stetho</sup>

Treatment - In extruded the ball if possible at 1<sup>st</sup>  
When concussion - Brain - n b kept quiet -  
& give most stimulants until reaction - &  
then red infl. Operat not necess. In Wounds &  
Contus a Temp Muscle - n lay open the aponeu-  
rosis - Can at Bladenburgh - a 23<sup>rd</sup> day convulsion  
relieved by opening the fascia.

Fracture - Cranium is dif fr the n by a  
bludgeon, as n so an splinters in the latter -  
When velocity is great only foramen - & the depress  
a skull not so great - Super cil arch n liable  
to b fractured in E. S. Wounds - Both Tables fractured  
the inner an splinter - In the skull if depra  
the kept n b affl. - 10<sup>th</sup> cut & a scale

48  
To ascertain the injuries - Kept me to apply  
a frontal sinuous to ext the ball - But dif-  
fic owing to irregularity - to avoid this we  
perf the ext table w a large tree & the inner  
one w a smaller one as we use it perpendi-  
cally. Sometimes diffie to ext the ball - Care Ball  
a frontal sinuous - flattened &c - extruded the end  
except a small sinus.

~~Expt~~ Dr Hare. Monday Nov. 29. 1849

Latent Heat - Divisible into two kinds - That wh  
becomes sensible on a change of situation in the  
particular that which is no sensible - Nitro pop-  
posses a great quantity of latent heat, no matter  
whether much cooled or much heated.

Experiment - Radiation of Heat - by Snow-Ball-  
being placed in the focus of one mirror & the  
Calorimeter in that of another -

Experiment - Radiation of different surfaces -

~~Porous~~ Metallic bodies combine with heat off read-  
ily than Porous as Chamois owing to the caloric  
in the latter being better able to penetrate its sub-  
stance, & is given out in the same proportion.



Where bodies become more dense heat is given out  
& vice versa - but this rule has to be universally  
established as to take place in all cases - D. Haue thinks  
that electricity when it produces corpuscular separa-  
tion is associated with heat - & when it causes ref-  
action between masses is not combined with caloric  
Chemical heat is dependant upon electrical excitation  
or we can not explain the phenomena of nature or  
Chemical action - Different subst h dif points of  
dens at wh they enter into combination - Thus  
alcohol h to be frozen - & were  $39^{\circ}$  bel zero or  $41^{\circ}$  bel  
the freezing point of water - & in these cases they absorb  
or give out differ quantities of Caloric - Expe - Mur-  
of lime & snow - condensed water on the outside of tubes -

2 Clases of bodies give out cold when combined with  
ice - Neutral Salts & Acids - owing to their affini-  
ty for water. The most deliquescent salts & the same  
unworkable - Pure potash & concentr sulph acid  
will not produce these effects -

Review of Experiments - difficult to connect <sup>the</sup> theory  
with experiment of a principle - as little to vary -  
Extract ~ 1<sup>st</sup> Lect. Phen of it in relation to Reaction

70 of 2 kinds - Attraction & Repulsion. Their position  
are of importance - The next portion is that both can  
reside in same matter at the same time - Then  
results from experimental investigations - D. Black  
experiment of H<sub>2</sub>O at 32 to H<sub>2</sub>O at 170 - & the effect  
& also the conversion of water into steam led to  
this important principle - & w<sup>th</sup> subseq<sup>t</sup> appl<sup>to</sup>  
appl<sup>to</sup> it phen in all substances - This led to  
hemi caloric, to disting<sup>ish</sup> it from its effects - The  
next subject was the means of making Caloric sen  
sible - Solar Beams, electricity, galvanism, coll<sup>ec</sup>  
attrition, percussion, friction, condensation, are  
the means by which it is accomplished - Then  
nature also shows - Under the T<sup>o</sup> of the Effects  
of Caloric, was Expansion - of fluids the Thermo  
meter was an example - Exceptions to this Law - w<sup>th</sup> wa  
ter after 39° expands & at the freezing point gains  
 $\frac{1}{9}$  in Bulk - Another exception is clay, in Wedg  
wood Pyrometer - The case of water is very dif  
ficult - ~~can~~ to be exp<sup>l</sup> by the polarity of the  
particles - Expl<sup>ain</sup>ing ice by ice &c -  
With Clay but little difficulty in explaining it.



as if we suppose the particular one in a few days  
of gestation - Many more persons & cases & cases. By  
which the construction is apparent. Big rate of increase  
of 6000 after 25000 - of substance - 10000 part  
of a small portion of the whole -

B. M. D. James. Monday Nov 29 1849 -

Care of Extirpation & Uterus by Mr. Newham -  
Complete Inversion & Uterus <sup>was</sup> caused by <sup>reflex in the</sup> separation & Placenta.

1<sup>st</sup> supposed to be a polypus & applied a ligature & discovered  
the point of the vagina appl the ligature. Delivered  
in Jan'y 1847 - 13<sup>th</sup> April applied the ligature - 14<sup>th</sup>  
tightened & pain irregular - similar to uterine contractions  
Openment made & specimen 16 restful & a tightness to  
lig - 17<sup>th</sup> Onfl right - pain & tenderness ceased - 18<sup>th</sup> sent to  
ward symptoms vanished. & tightened the ligature - no  
symptoms 26<sup>th</sup> very irritable no bad symptoms -  
6 May no pain & tumor has detached - size & hot -  
15<sup>th</sup> no discharge & became convalescent - Cont Mus Fibres  
Healed & Cancer Uteri - Increased in Bulk  
firm & hard, & when cut open cells - Intestine inf. Uter-  
extend. & vagin, bladder, rectum - Ipermeity & the st  
to include under the Gen. l of Carcinoma & Ulcer

72<sup>nd</sup> Sea attacks the cervix uteri. but the fundus -  
when violence is done, signs rapidly - Discharge of  
mucus - Baffle all att to cure & in effect none  
Eccuta & Solanum best - injections if these dis-  
useful - Arsenic Sat. Sol. 3ss & 6ij Aquae -  
Mud - Alumina - Bark, Castoreum, Eleuthero  
Cort. - Perri & rec by Carnick in Cancer -  
Best in Schirrus Enlargement ~ of Uteri - Dr  
Lammy - Dr. Olander - he excised the whole Uteri -  
As it commences ~ or twice per fatal but it is  
destroyed - When it may be cured by excision  
When the disease has extended ~ Vagina fatal -  
Has been performed 17 times successfully - Su-  
perstices performed 8 times - Dr. Olander - drew it  
down by threads - & cut a bistoury horizontally  
thru the fundus uteri above the cancer - Then  
Tornier & Astruc injections - vide Collect. Rep. 7<sup>th</sup> vol  
This dis is not codex uteri Ovaria but  
has dis - per fatal -

Dropsy of Uterus - Treatment must be done -  
is very frequent - Give 50 lbs of Water - Bouquet  
70 lbs of Water - Most usually Hydatids - & in frequent.



Case D. James - Supposed 5<sup>th</sup> mo pregnancy - & great 73  
pain similar to abortion - Ruptured the Membrane  
& numerous vesicles - no ovum or foetus - seen coiled  
& got well - Mr. Home relates a case of this kind  
& supposes it a pen affect & amnion - The foetus dis-  
appears - 2<sup>d</sup> Vol London Med. & Phys. Jour - Quercus 3 lbs &  
2<sup>d</sup> <sup>Hydatids</sup> were discharged - Also Magazine - de - Quercus - Pres-  
umes they proceed & death & ovum - Hartman 1<sup>st</sup>  
& Tyson proved they were a species of worms -  
& Hunter & Pallas proved their vitality - found in sheep -  
Also found in other parts of body - vesicles containing  
worms resembling Venia - Leontaud & Mysel L in  
with a brain - Dr. Baillie counted the Hydatid of sheep  
similar to those in liver - & one worm in living air -  
Seldom fatal when outlet is established & when in  
mercury in to suppl - Case 145<sup>3</sup> byd a lump by Colo-  
mel - in L orig & liver & proceed to other Trachea -  
Change of air, good diet, exercise, & rest. the act & vas-  
cular system - Burns recover the Bougie & Asta  
inject - Rep & liver sig fr the Uterus - Resant Old Bot

D.<sup>r</sup> Core Tuesday Nov. 30<sup>th</sup> 1879.

In Phlegmasia - It is the chief dependence  
 It does the off of disorganization & is the best  
 remedy - 1<sup>st</sup> We relieve local pain, which agt  
 2<sup>nd</sup> The Gen fet system are dim  
 3<sup>rd</sup> The Disordered function restored  
 4<sup>th</sup> Gangrene & suppuration prevented.  
 5<sup>th</sup> Prevent effusion -  
 6<sup>th</sup> Prepare for the remedies, & hasten  
 their operation - both  
 7<sup>th</sup> Restore the organization by removing con-  
 fusions

Sometimes we meet it in general  
 fever - Also Local vs. Gen.

Vide Dorsey.

In Phlebitis - Not necessary to open  
 the Jugula - vein - Gen system as  
 well be evacuated from the arm -



Wounds of the Face - Bones & muscles are  
 wounded. Chief danger are the bones. The nose is  
 simply fractured or forced in on the Ethmoid bone.  
 Great danger of cancer & prof suppuration. It is treated  
 in some cases as those from other causes. In others  
 an extra splint is kept over the wound. The eye in  
 many cases is much injured - Case - the nose & eye  
 & came out at the temple - Cheek bone alone & little  
 injury except when other parts are injured - Case 5<sup>th</sup> The  
 wound thro' the bone & cheek & came out at the temple  
 - Offended a Upper Jaw - dangerous, <sup>very</sup> destroy the  
 Anterior Maxillae & injure the eyes. Case - Ball lodged  
 in cavity of Anterior Maxilla: Living meat put into &  
 much matter formed - When Wound in or bleeding  
 from bones -

~ Lower Jaw - Attended in serious cases - As  
 nerves are protected but - or if fractured - attended in  
 all the symptoms of compound fracture. Skin is so apt  
 to be proper as lays out & scarcely escape being  
 injured - Must also dread tedious supp, exfol  
 teeth & whole jaw can be destroyed - Case Officer

76 Fracture - Lower Jaw. at North point. Colours  
vs. then covered but no swelling, next found in-  
jured - treated as comp. fract. & recovered. Case  
fracture, splinters, hemorrhage & ecchymosis. treated  
as fracture, vs. bawls open, low diet, & diffen-  
& collect of matter & pieces of bone - fistulous  
openings - finally recover

Wounds & Neck - Diffen accord - velocity - Verte-  
brae w. or w/o be fractured - Dorsal & Lumbar w.  
& often splintered - Wh Cerv. vert. inj. Sp. Mann  
is not usually injured. Symptoms of concussion.  
Much danger of hem-or. tho' it is great at 1st as  
in other wounds - But wh. sloughs not get dan-  
ger of secondary hem. - I M. Th. joined against  
secondary hemorrhage - I can also be done - Case  
wh. little danger apprehended - I hem came on  
three times - I had to cut down & tie the ligament  
ab - In such cases it is best to cut down  
& tie the artery on the trunk, to prevent second he-  
m. fract. best. w. to be great care to guard against  
splinters - In most cases the process splintered  
& ball pushed out.



Wounds - Chest - A also mortal - sometimes to let  
injury - C, sent here what part - If ball enters  
the Chest in diff situation - will diff be wounded -  
vide Charles Bell - It sometimes prevents the  
entrance a Ball & wound only superficial, unless  
the rib is much contused - Sometimes Lungs not Woun-  
ded - at the both ball & speculum wound the <sup>lung</sup> rib -  
Less dangerous than sword or bayonet - May fol-  
low the same effects as other wounds - Empyema  
Extravasation, Empyema - treated as from other can-  
cers - Spl. rem Splinters - & fract Sternum by trap  
knife - When Lungs appear the pl & lungs, extr into the  
lungs & chest - Is m & lodged - lungs, or fract rib  
or cloth & great infl produced, with great tumors  
of matter - Acute fever follows & if no relief  
die - But: exist for a long time - Case - Capt! Jordan  
wounded in a duel - Ruptured 7<sup>th</sup> Rib - & lodged below scap-  
ward the lungs, fract rib, & spine a verteb - Pain soon  
ceased - w<sup>ch</sup> he was exhausted - & confined on his back -  
fract wound soon healed - this produced distressing symp-  
toms - Acute fever - &c - free to wound m in debilit  
health & aft been compl cured - Copious sup -

78  
penetration ensued. Dilated the external orifice. &  
facilitated exfoliation. Detached rib & vertebrae were  
eaten by Dr. P. & Warren - Dr. S. saw him in 1811.  
I ascertained the cavity ~ rib & empty ~ right side  
~ chest - Tent removed to discharge matter -  
Thought the dish owing to external matter or skin  
was a lung or bark or habit or admission of  
air - must ascertain whether it is cancer &  
will enlarge the orifice by Tent - if not, will  
wash out by warm water & close the wound.  
Syringed the cavity & cloth was washed out - got  
much better. I died in 1816 - When he died - Wt  
left side empty - bone & lead lodged - disfigured  
And the skin to go to W<sup>o</sup> I recovered.

D. S. Wounds & abscess require the same tr.

Wrote Hunter, he found, Chevalier H. Bell  
Dr. Horner used: recorder -

Next Abscess -

Dr. Hare Tuesday.

Respiration - Centigrade thermometer - but a very  
Decomposition - then showed the expansion of  
elastic fluids, but it was necessary to mention  
the pressure ~ atmosphere.



79.  
Air as it becomes more rare, requires more heat to  
sustain water in solution - When there is much air  
there is more cold than where there is a plain - Thus  
mountains are colder than plains - owing to its being  
exposed to a stratum of air of any distance - Another  
cause of difference in weather or temperature is that  
a stratum may be rendered lighter either by a diminu-  
tion of ~~caloric~~ pressure or increase of pressure -  
Use of Mountains is to condense moisture - as the cause  
a mixture of the warm moist air of low countries  
with the cold dry air of the upper regions - Proven at  
this time by the Quantity of rain in the eastern states  
or highlands while so great a drought exists here -  
Mountains supply plains with moisture & plains supply  
mountains with warmth - Snow produces warmth  
owing to mixture of different vapours - & snow  
checks cold - The Density of Atmosphere varies very much  
at 3 1/2 miles 1/2 - & 10 miles - at 35 miles the air is  
rarer than we can get it in an air pump - & 70 miles  
1,000,000 - Solid matters can be formed in the air as  
it would take millions of miles to form one mass  
of metallic matter, as iron, nickel, manganese

& it is impossible to conceive how these matters  
 can be formed - As water only is found in  
 drops & never descends in hoops heads as it might  
 if this ~~were~~ the case. Elasticity depends upon  
 the power by which a body compressed returns  
 to its original size - Air pump is founded on the  
 principle of Elasticity - There is a great difference between  
 the power necessary to abstract air & water - as we  
 never can produce a perfect vacuum with the air  
 pump. Pressure of the Atmosphere <sup>consists in</sup> ~~air~~ Chemical attri-  
 tion - as the removal of it, increases the separation be-  
 tween the particles in body - If additional caloric is  
 added the cohesion is entirely overcome & if ~~an~~  
 increased particles are added the body remains the  
 same - Experiment of Ether. Effect was the same when  
 caloric was added or atmospheric pressure re-  
 moved - Boiling point, therefore, not only is dependent  
 upon the heat applied, but also upon the pressure  
 of the atmosphere - By increasing pressure may increase  
 heat & in this way the solvent power of water is  
 very much increased, as caloric itself is a solvent  
 & assists the solvent power of the fluid or water.



81  
On this principle Papin's digester is constructed. - Thirty  
degrees of heat increased or requires the pressure of another  
or atmosphere - & in this way may account for earth-  
quakes arising to the vast pressure which the earth af-  
fords to confined air become heated by subterraneous  
fires, being suddenly removed. If earth was subjected  
to red heat, many substances would become vapor,  
the pressure & atmosphere w<sup>d</sup> be increased, & finally wa-  
ter would cease to boil. - Theory of the Earth - Hutton's  
theory <sup>was supposed not</sup> not correct, as many substances w<sup>h</sup> we have  
could not be the product of heat. - But Sir J. Earle  
proved that when subjected to great pressure - lime-  
stone & bitumens may be fused, without being decom-  
posed. - Boiling point was shown to depend on compo-  
und ratio of heat & pressure. - Modification of the atom-  
ic theory, presumes that bodies combine in measures or vol-  
umes. - While the atmosphere prevents evaporation in one way  
it facilitates it in another. - when a different substance  
is interposed or the atmosphere presses only indirectly  
the point remains fluid. - But when in immediate contact  
with the water, they combine chemically & the water evap-  
orates.

52  
L. James. Wednesday Dec 1<sup>st</sup> 1842

Imperfection ~ Uterus - Case when but one fallopian tube and ovarium & bore several children of both sexes. Also Case by Cole of double Uterus - <sup>also</sup> Duguid's case -  
Cases a case of Double Uterus -

Aqueous Tumour & b. disc ~ round ligaments.  
Hernia Uteri ~ Abdom. rig & Crural Arch. Case  
~ Hernia ~ Prog. Uterus - Treatment same as other Hernia.  
Inversion ~ Misc. Memb: b. b. s. & b. invert,  
but I c. hardly feel it - It m. b. a memb. found  
~ Uterus -

Calculi Uteri - rare - Capsule & serous layers  
of calcareous matter lining the uterus - Prof. Lally-  
mand - Sp. f. int: ~ Uterus -

Retroflexion ~ Uterus - case by Denman, &  
rare - When the fundus is bent & lies betw. the rect. &  
vag. Can only take pl. in med. post. Decline - Film  
drawn off in situ & treat as Retrover.

Hydrocele Perinei - few def. up per. droppings.  
When large - puncture - vide Denman -

Hernia Vaginalis - M. b. reduced w/ C. Abdom.  
or. bad Course -



Hard Tubercles - from the Uterus - dif: size - seldom<sup>82</sup>  
Uterate - Has seen them as large as the child's head & mis-  
taken for pregnancy - Orig near the fundus & at first only  
connected by cellular mem<sup>ts</sup>: but soon become involv<sup>d</sup>  
subst<sup>n</sup> & Uterus itself - & form almost one substance &  
Uterus - Example of a very large tumor involving the sub-  
stance & Uterus & covered externally with smaller tubercles

Deposition of Albuminous Matter & Uterus, &c.  
See. Related by Monro. Resembles a bees wax & yellow -

Fleshy Tumors or Moles. - Uterus - Dif: sizes - con-  
sistence - See from a virgin Uterus - resemble pregnancy  
but advances faster than preg - See desc: left quickening  
& after quick & increase so much as preg - attend w<sup>th</sup>  
Hemorrhage -

Spongoid Tumor - vide Burns - firm elastic  
tumor, irregular, bluish & dark red fluid & purg Uter -  
Cauliflower Excresc of Dr. Clarke vide Burns -  
Inj<sup>ct</sup>: Cortex Quercus & Alum -

Tympanites Uteri - secreted & uterine vessels -  
troublesome - arise to that & rectum - Dr. Church case  
Buck, Chulph, cold bath, astrucy inject - cast Querc<sup>i</sup>  
& Alum - exercise - Cured by Pregnancy -

*Sulphuretted azote -*

Dis & Hallop: Tube - Infl & later not extend,  
 & Hallop Tube - also violent Perit: Infl - causes  
 adhesions & funebriated extremities - Dropsy & Hallop  
 tube not occurs - owing to both ends being closed.

Ovarium & Hallop Tube - becomes developed - but  
 & full period of gestation - ruptures, <sup>usually follows from</sup> then on shop.

Dropsy & Ovarium - In apt to commence  
 after loss or supp & menies - Disting from Abscess  
 more lateral & early stage - Excision 5 Cases by D. M.  
 Domicile of Danville Kentucky - & 4 with success.  
 Vide 7<sup>th</sup> vol & Select Report.

D. Gibson - Thursday Dec. 2<sup>nd</sup> 1819 -

Of Abscess. Also my meant in only part to abs  
 blood - all arise fr all the causes of infl - to some  
 without said cause & called spontaneous, per - under  
 & Cellul - Membr - apper to surface per - prevent affe  
 sions - In some cases bursts internally, in such case  
 the action to the surface can be interrupted or get into  
 really fast - Druff causes just the prog & surface -  
 The surface is diffusional or want of expt a me -  
 the prog is Mechan & is owing to work of a part.



The healthier an abscess the quicker & smaller orifice  
 The contrary takes place in indolent abscess. The pus  
 a local sin. The system but is generally affected & pre-  
 scribes the formation of abscess. Reticles may be induced  
 Symptoms of suppuration - Soft, white yellow spot.

1<sup>st</sup> Rule, then Suppuration & Ulcer - in some cases the result  
 is direct spontaneous - but in other cases surgical aid necessary  
 when suppuration is inevitable in hasten it - The subject will  
 afford heat we may - heat when combined with  
 moisture - 2 forms - Poultices & fomentations - 1<sup>st</sup> Best  
 moist with a Indian meal also Flax seed & continued also  
 prop to add oil - The degree of heat to be regulated -  
 state & parts - When the hot, gangrene - also in proof  
 & depth the greater the heat & in most on towards the sur-  
 face - Skin remedies are to support strength, rich  
 diet & Tonic Medicines -

Quint. Whether abs. sh. be open by art. - When cut by  
 poultices & surf sh. be done - But when deep in re-  
 sort to surgery open - Also what sort of cavities as  
 Throat & Abdomen - When a deep incision is required we  
 be cautious - Some open every abscess, which is a  
 healthy but it is improper - & 1<sup>st</sup> only to be open

When day of life on a m b brot a surf -  
 2 modes of open - Incis & Canthic -  
 Deep th incision, pain moment - Canthic dif  
 to heal, large opening, destruction of skin, also wh  
 deep, can't c m b at all compl - Patient not off  
 to knife & then on one th knife - Hunt a free  
 incis recip - but on in deep seats parts -  
 Common Lancet - aft coac, a mm post  
 tice m b offl & heat grad increased - 3 weth  
 Seton - n v surf - wh secret action is long  
 m b inid - Paped & bottom - wh m inid m  
 b withdram - When open remains Sinus or  
 Fistula rem - In th cases m aband for trt  
 ment - Partic: Abscess

1st Centrum Maxillare - Every age & sex  
 adults m freq - Sometimes <sup>glaciously</sup> proceeds from <sup>9e10</sup> faint  
 of a tooth - <sup>accompanying the inf & being</sup> <sup>membrane</sup> of a tooth - All fr <sup>you explain</sup> - & proceeds to every  
 cell - Gen attrib to toothache - Dis bee aff as it  
 abo - Pain whr a head, eyes, fever, When it stays  
 over, swelling & cheek & alveolar process & muth  
 discharged rife th abs but unrounding, abscess  
 When m a centr - gen abscess is prod & d m co



fen evacuated at the point - Palate Bone - sent  
thro the mouth - Abs. infer orbita plate into the  
eye - Matter very fetid - & great stench - & is a cu-  
rative characteristic & disease - Attrib. to contact  
with the air - Matter not dried into the nose  
At times shift oozing from the foramen -  
Old surgeons not acquainted with them - Old methods  
were to enter molars & perf w a stilet - but few  
could in effect it is in no use -  
One & Portena Molars - 3<sup>d</sup> Best - corresponds -  
Middle & Ant. Stilet in b into to enlarge the orif.  
When the matter is dried the matter was once & in  
b, an astringent inject R. Myrrh, Sulf / Zinc  
or Decott of Oak Bark - French advise remov  
anterior part & cheek bel chlk bone & at 3<sup>d</sup> Molars -  
Qui. Raise the lip & apply small Trephine - Wh let  
out, asting & washed w Zinc - The. in b followed esp  
in cstr cases, wth ind rectt or thick alveoli -  
Wh in best ext - in end by Treph - 3<sup>d</sup> Method  
Acordine - Enlarging natural opening into a  
more - Butro is pract; but very difficult - Syringe  
c in b introduced - It used in London -

In fistula & dentist post. - Infrequent - Many  
 enlarge the fist opening & vice versa - Use various  
 medicines if not done - Ext 3<sup>d</sup> Mol: Tooth is  
 the best method: & after injections - can & a good  
 Abscess & Frontal Sinus - It seen 2 cases - Trephining  
 Matter air in bone above the Sphenoid & at the  
 Mammary Abscess - Cancer - W. J. for son  
 infested - D. Underwood - says owing to cold - pain  
 by Sphenoid, swelling, redness, & severe pain, when  
 cellular membrane in face - Milk glands saw swelling  
 or clotted, tumor & hard & milk stopped - Suffer  
 soon & eat - That remains a long time  
 Sinuses not in every direct - Treatment - early  
 seen on top of the belly - often seen on in adipose  
 & topical or by leeches - use many - When treated  
 cover the breast or cloth - not head - Purgatives  
 & the in face few infl. - When it has progressed  
 diff to prevent suppuration - Lycopodium plaster &  
 in some entirely checked suppuration -  
 When Abscess formed, change treatment - & en-  
 courage suppuration - Knife is improper - Hunter  
 1<sup>st</sup> to prove this, glandular structure apt to be



wounded. Spontaneous opening of abscess - Apply a  
poultice - When incised under the skin use  
lancet - When sinuses, abscesses, & stricture in  
jection - When many sinuses, uniform pressure  
in one case consolidated the sinuses - in many  
cases press or cure the disease - It is in lay open  
the abscess with knife - In some cases seton  
necessary and by passing gun shot probe around  
with silk -

Le Havre Thursday Dec<sup>r</sup> 2<sup>nd</sup> Recapitulation

Why does not high pressure steam radiate as much as  
steam at diminished pressure? Owing to the addition  
of capacity for heat - & the sensible heat is dimi-  
nished. But was specific heat - Different bodies  
absorb different quantities of caloric - Water & stones  
Flat copper vessels heated with boiling water - at 1000  
copper 120 lbs in 60 - sec - for water in bulk takes 2<sup>nd</sup>  
the quantity of heat more than mercury -  
Next carrier indicator of heat. Slow & Quick  
communication - How, conducting & circulation  
with solids & fluids - Method of conducting heat - Heat  
will always be diffused through the whole medium

94.1 Next Radiation of Heat - The air is not as  
it is supposed a bad conductor. but only  
comparatively speaking - owing to its rarity  
& it takes away much heat by conduction.  
In smoking stoves sh<sup>d</sup> attend to the radiation - it is  
the heat most to be considered -

Quene. W<sup>d</sup> not a polished stone cook best &  
a dull one heat the room best.)

Caloric exists in three states - 1<sup>st</sup> Subliming matter  
preparing it - 2<sup>nd</sup> -

Of Light - The different betw eyes open & shut  
is light - Philosophers differ - some suppose it per-  
vades the world & set in motion by diff<sup>r</sup> bodies  
Newton theory best - that it is ponderable & gain  
off by luminous bodies - <sup>2000</sup> 200-000 miles in a  
minute - No reason a priori, why matter re-  
is b as small as fly as swift is necessity demands  
If heaven is indivisible & world requires re-  
ate division - The reflection of light - angle of  
incidence is also equal to angle of reflection -  
Particles of light are attracted by ponderable matter  
& the line is bent to form an angle -



The angle of refraction bears with the perpendicular.  
 Diff. bodies refract differently - glass 2 & 3. Diamond 2 & 5.  
 Dispersion of light - disperses differently in passing thro' a  
 hole in a shutter - Red, orange, yellow, green, blue, indigo, & violet - On this was founded Newton's theory of  
 colour - The spectrum was supposed to be made of  
 but few rays 2 or 3 - This is Mechanism -  
 Query? whether heat accompanies light or whether  
 light displaces heat - But Herschel discovered rays  
 which heated but did not illumine - greatest light between  
 yellow & green, heat red, & decaying in violet.  
 Light decomposes very independant of its ~~chemical~~ or  
 heating property - Leaves afford oxygen when placed  
 under water - Acids decompose & salts blacken at the  
 violet and owing to decaying - Phosphorus in  
 flames - red & extinguishes - violet - Herschel suppo-  
 sed the greatest heating power lay in the red ray - But Be-  
 rard supposed it existed in the red ray - Dr. Haug  
 thinks there is high authority for doubting the materi-  
 ality of heat - arguments - Howbery's pyrophorus is prepared  
 by adding 1 part of calcined alum 2 parts pearl ash, & 1/4 Charcoal  
 & igniting them for an hour in a retort.

92. Dr. James Thursday Dec: 2<sup>nd</sup> 1873  
Dropsy of the Ovarium - Can only perform  
Paracentesis - We use a large trochar as matter  
is gelatinous - sometimes on a p. thro. the crural.  
Case gelatinous fluid extruded the abdominal viscera -  
matter contained in cysts few of a differ appearance -  
but in one case the contents of all were the same.  
In one case dropsy of both ov. existed, & no fluid  
followed the intro. trochar - Disturb. for Preg -  
must exam per vaginam to ascertain if it exists.  
Cases where pregnancy has been mistaken - Mrs. Fitz-  
gerald - Scrophulous tumors of the Ovaria - soft  
chessy subst. - Burnt sponge, extract of mercury  
& L. used in vain, but in L. palliation & attend  
to bowels & bladder -

Spongoid tumour - ovaries - Burns -  
Of Conceptions.

Embryonic changes are very minute - Earth  
animate & inanimate matter, latter indistinctly  
Anim. & Veg. distinguishable - Both of diff. duration &  
Capable of being destroyed by accident & disease & can be  
re-generated - Accompl. by passions - not violent  
as frogs -



Animals suffer spontaneous generation - animated  
 by heat & moisture - as vile - but owing to sen-  
 sibility - In the veg. sexes separate - Palm tree -  
 B in the trunk & comb & coat a new plant - In  
 Pencilous fl. female longest & erect, male - Some  
 In the veg. & the power of reproduction is polytypic & Hetero-  
 typic - Lobster - Human species can not be  
 reproduced in whole but only part of a part -  
 Some animals Androgynous as mist & earth  
 worm - Males impregnate each other - in  
 some the intermixture of a kind is necessary -  
 Even in most animals sexes distinct - A  
 real Hermaphrodite exists - When distinct, can  
 produce either one or other sex - sometimes mix-  
 ture of both, or males & males distinct & many  
 kind prod mixed with a new breed - Black & white  
 h. being the same - Horses suff. coitus took  
 place in all, but recent exceptions - In period  
 various much - In cock & hen - quick - slow in  
 dog & frog - The effect is semen & conveyed into  
 the vagina - small quantity will impregnate  
 Halloway - Semen does pass into the uterus.

Proven by J. Hunter, who saw the semen in  
94 a bitch enter the uterus per saltum <sup>during coition</sup> - Deede 1805  
of Ellroth in Blumenbach - Also in Phil Trans  
action <sup>1817</sup> paper by Sir E. Dowe - "It is disputed whether  
the semen enters the uterus & come in contact.  
He as J. Hunter open the uterus a bitch killed at  
coition he saw clearly the semen passing into  
the uterus per saltum - D. Physick in 1795 - Heard  
the following experiment - J. Hunter supposed that  
the semen came in contact w<sup>th</sup> the ovaries - Opin  
of Ruych, Haller, Chevalier - De Graaf. It is the  
universal & prevalent opinion, that the in f. Britain  
& East of Europe - Conception of semen con  
sists in insemination - Experiment <sup>of Haller</sup> with watch  
glass - Changes in the female - Ovary swells  
burst & ovum enters the uterus - resulting Cor  
pus luteum - can't reproduce - Sir E. Dowe  
In order to cause in both sexes coition  
recept. puberty, <sup>passions</sup> was dependent previous, & in  
females, menstruation depends on ovaries -  
As uterus previous & perfect - previous Haller.  
Suber - Whiston when destroyed the P. tubes were  
shut - Did not deny that the semen enters the uterus



Different theory - 1<sup>st</sup> & Mother 2<sup>nd</sup> Father - 73<sup>rd</sup>  
from both - Last an ancient - Aristotle & Hippocrates  
supposed male & right & few & left - but contrary  
"Gaffor sup<sup>ts</sup> it exists in mat a species of  
matter w<sup>ch</sup> grows at all mature - genus bec-  
- was spent dif bet anim & veg & the matter  
necessary for both - & every anim sub could  
"as an internal mode entering a mouth & con-  
veyed to reservoir receive them when developed  
"properly - This seminal fluid is the perfect prin-  
ciple of the body - & it is a collected & number -  
"and the seminal fluid of both sexes is organic  
"When confined <sup>in</sup> too great quantity produce tumor  
"as cancer, &c. very depending to human nature! -  
The number, motion, & course of the organic  
particles causes the difference of the species -  
"When one <sup>fluid</sup> or the female predominates the female  
"children are born - "B perfect children are born  
from imperfect parents - & lower orders of animals  
contradict it, as tadpoles, caterpillars, &c -  
Theorists & Chemists - 1<sup>st</sup> That males & females are  
united by attraction & tension & said 2<sup>nd</sup> That fer-

mentation took place in the uterus in it.  
96  
Semper - Paracelsus 1<sup>st</sup> L C<sup>o</sup> period - Retard.  
Next - Stiles the 1<sup>st</sup> male semen prod the 1<sup>st</sup> male  
Leuwenhoeck experimented by microscope 1<sup>st</sup> he found  
small animalcules in semen - 2<sup>nd</sup> he supposed  
only one entered the uterus - Next De-  
Bourf sup. it w. cont. in membranes -  
Quentin - 1 Rememb. parents - 2 Rememb.  
both 3<sup>rd</sup> The prod. of Mules. These animal  
cul can be discov. in the parts. Spallanzani  
says, seminal vesicles & not to d. in semen.  
Next Theory - That the egg is prod. & hatched  
alone - Haller - Spallanz. J. Quenter - says ovi-  
resides a female & only waits the sperm & makes  
a new semen, which does not enter into com-  
bination - It is an Diff. The individuality  
to both parents - see & attrib. to virginity  
b c in the pl: & home - Best Theory is that the  
foetus is formed from both parents - accounts  
for similarity to both parents - No probable  
opn is that of aqua-fortis that all is for-  
med (from the 1<sup>st</sup>) (Digitis in unum) or first  
of the denting



Dr. Gibson Friday Dec. 3<sup>d</sup> 1849 -

97

Abscess & Liver - Abscess for peritonitis - Heavy  
remembrance in suppuration - Symptoms - Obvious local  
pain, pointed, when a convex spot for distention, when  
a concave is easily perceived; when convex & peculiar  
fluctuation - Depends upon situation whether dangerous -  
When it cannot not be dangerous, matter is discharged  
& put gets well - When a concave dangerous - Adhes.  
& matter dis - into <sup>Bile</sup> - gate duct - Sometimes it  
is discharged in chest - into the abdomen, peritonitis  
occurs - When a Chest suff. when sent a vessel -  
When into the intestines, no matter is discharged -  
Will prove to depend the system - Causes various,  
one peculiar cause is from blows on the Head -  
Bertrandi - remarks that abs. per. succeeds bl. & H.  
Case Fracture - Cranium - death & 70 years & liver -  
Occasional secondary Later urine, & on death abscess - skin  
another case - Wound H. penetrating & dura mater - Dist. cured  
in 2 months & soon returned with swollen head - face  
diffic. breathing & died & no morbid app. & head but  
large abscess & liver - H. never - compl. of pain in  
this part except weight -

It is difficult to tell when matter collects  
in the Liver as sometimes but little fluctuation.  
Sometimes nec to cut into right side -

Mistaken for other dis - Gall <sup>bladder</sup> distended  
& circumscribed & under the liver & Abscess con-  
tains different kinds of matter, cheesy, curdy.  
Whole substance sometimes is displaced.

Treatment - Difficult Good diet, acids, particu-  
larly nitric to prev suppuration - They fail  
& matter is formed - Sometimes but simple puncture  
use is necessary - Antiseptic large incision - It?  
cut on depend or thinnest part.

Operat. - Incis down to the peritoneum & the cut  
through the peritoneum - Large - need not mind  
the direction - incision <sup>caustic or good</sup> - After matter disch.  
(when matter does not become purulent) as the case of the open  
patients become much better, increased appetite.  
It is not uncommon to open -  
Matter free, disch for some days - Injections  
of port Wine, warm water &c.

Collections of Matter betw Abd. Muscles -  
Mostly between Rect. Major & Transver. & Peri-  
toneum - In Puerperal women, not possible  
Antiseptic from any one deliver me of bet the  
periton & muscles -



Treatment - must puncture early - to prevent effusion of matter - Avoid Epigastric artery - Use & cut on the director - Trochar in good unless very prominent - Tonics & good diet -

Matter in Epiploon - not frequent -

Abscess in the Abdominal muscles - Cure by Evulsion -

Abscess in Kidney - in frey - painful & dangerous - owing to calculi producing suppuration - Deep seated pain in region of kidney & prominent - Urine permanent, subtle prominent symptoms - some -

times perineal region is disch - fine - but c dis -

When parts <sup>beneath the spine posterior to kidney</sup> matter is diffused - Treatment -

Incise above opening & back - Proper place between

12<sup>th</sup> rib & ilium - cut thro Quadr. Lumb. muscle -

Sh. not cut down unless very free - one takes

away calculi - Sometimes buried in the Kidney

only in b kept open until calculi disch - Tonic

& gen treatment - Case - Subject to calculi - Tumor

in right side - spine - opened & v weak, stone extr.

tent introduced, & calculi came away, urine passed

out & opening - & matter & urine - died in 10 mo.

Abscess in Ovaria very rare - sometimes from

160  
Dropsy - or easy to ascertain it as compounded  
with Lumbago Abscess. Symptoms - Swelling of  
the abdomen - Walls, hard, matter saucous -  
Some advise Trochar - others Best to puncture  
grad & knife - <sup>operated 2<sup>nd</sup></sup> can avoid the epig. art. When  
matter disch. inject - Gen. Treat - Tonic.  
Abscess - Bladder - rare - only in certain con-  
ditions - Cancer - Stones, strictures - few  
obstruct: of urine - When matter travels thro:  
the cellular memb.: very dangerous as urine.  
Treatment - Introduce catheter & dr off urine  
When not possible - or puncture the bladder thro:  
the rectum with Poncet's curved Trochar -  
Stimul Balmam or if must use -  
Abscess - Testicle - No fix caused by inject.  
for Hydrocele - also follows Haem. Hemor.  
When a T. V. Testis is dangerous, <sup>& more painful</sup> than when in the  
Body - Testicle - Wh? always puncture before  
extirpation - according to Pott - Subst - testicle itself.  
L & mistakes for matter - When body diseased,  
slight discharges of matter - apparently are indeed  
the substance - testicle - I L m? the same is  
the myself - When a T. V. S. in Body treatment




is the same. Warm poultice. When matter col-  
lected open with Trocar, or Hydrocele. 101

Abscess of the Joints. dangerous. important results.  
Causes - Mud, foreign bodies, &c. - all at times some-  
times external, then, not so severe. They require  
the most speedy & determined treatment - Abscess  
fistula, stiff joint &c. result from improper treatment  
Case, caused by flap, neglected by a quack. Very bad  
course - laid open the wound & discharged matter -  
did not cure - Acute sup - stion Bone & Wound &  
finally got well with stiff joint -  
When inflammation & matter - incisions & tents  
or bony to let the matter discharge -

Dr. Hare Friday - Dec 22.

Light in passing through a prism is always attracted  
by the nearest surface -

Polarization of light - Property of Iceland crystal, by  
exhibiting two lines, when but one was present - The  
When another was placed on it, those rays which passed  
through the first a first, were it created in the  
second & vice versa - Reflected light does not possess  
the same properties as before - By varying the position  
of reflecting surfaces the rays are differently

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reflected. Diagram -  Explained  
in this way - That some rays pass through  
the pores of transparent bodies in a perpendicular  
direction owing to their polarity - While with  
other surfaces they will be reflected.

Phosphorescence - Diff: kinds - Ocean borrowed  
light - Expl in 2 ways - 1: During day water light  
becomes entangled with the water & given out by  
friction & 2<sup>ndly</sup> By spores or decomposition of  
fish - Some attribute the Phosphorescence chiefly  
to respiration - but not so - it is luminous under  
water, alcohol, oxygen gas in common air -  
Lime & Sulphur, Sulphuret of Barites calc-  
ined possess this property - Other kind of Phos-  
phor by friction - Ivory, sugar - similar to  
electricity & analogous.

Specific Gravity - Purity of Gold ascertained by  
their levity = alcohol & ether by their levity - Also  
solution of salts ascert by spec gravity & dist  
illers & brewers ascertain the strength of wort  
&c by spec gravity - Spec grav is weight in  
relation to bulk - The weight of 2 bulks being  
known by dividing the bulk the spec gravity is



previous - Reference to water is necessary in  
order to have a common Standard - & water is <sup>1000</sup>  
also had pure by distil & at a certain temp is  
also of a certain weight - The general principle  
by which Spec weight is obtained is by weighing in  
water the substance - & the resistance which the body  
meets in water is equal to ~~its own weight in~~ <sup>the bulk of the</sup>  
water displaced & by adding the bulk of water  
displaced the scales will be equiponderant -  
First find the bulk displaced & the weight of that  
bulk & divide one by the other & the Spec Grav is obtained  
To ascertain the weight of fluids - Weigh them with  
water in a small glass bottle <sup>of known weight</sup> - Can also ascertain  
the Spec weight of powders - Strong spirit 825 per  
with water at 1000 - & in this way Spec Grav ascertain  
Hydrometers French - The principle is that more  
or less of the stem sinks as the body is denser or  
the Spec Grav is greater or less - The Alcoholometer  
scale commences above, as it is on a level when in  
pure alcohol & at the bottom <sup>at 1000</sup> when in water -  
& in fluids heavier than water, vice versa - <sup>2</sup>  
There is where salts are dissolved -

In performing these experiments - Must attend

104. to the temperature - Alcohol varies more than  
any other fluid -

Dr James Smith Dec 3<sup>rd</sup> 1879 -

Keight found the ear a little full of pus & was  
certain & also the fallop tube & as he was constantly  
employed in dissection could not easily be secured - In  
the above case the woman was killed & immediately  
afterwards he found the semen in the uterus, here  
concocted - He pressed semen out of the ov. uteri & also  
found it in the cavity of the uterus & fallopian tubes.

De Graaf & Mr. Wharton suppose the semen pass into

of the changes which take place in the uterus  
or a Pravid uterus. Dr. Blumfield has completely

overturned Wharton's theory - Comparing not a  
certain sign of impregnation as we have been told  
in the virgin - Thomas Hunter, de Fallop. tubes

possess peristaltic action - James the the semen in

is carried in uterus - changes - peristaltic action - over  
escapes & carried in uterus - This action is not taken place

immediately - De Graaf found no alter. bef 40 hours

Haller & Balanus never found bef the 17 day - Sir E.

Howe has found it on the 8<sup>th</sup> day - "On the passage -

ovum - "Keight & De Graaf - united by theory -



After death examined - Was impregnated for 8 Days  
before death - Vagina was very inflamed & yellowish or  
purplish structure - Corpus but I believe to come off  
of conceptus but in this case I was present - It is a  
solid compact glandular substance, not secreted the  
ovum - In Virgin it is distinct each later & more  
out ~~of the ovary~~ - Membrane & Wall Pales dur-  
ing but embrace the ovum - Relations matter is also  
seen & it being after impregnation & affe to be to pre-  
vent further impregnation - Some suppose that the ovum  
becomes a male an commencement & foetus by  
the semen - Dr. James H. H. Corpus luteum explains  
uterus body becoming the ovum - The 1<sup>st</sup> Changes take  
place in Uterus - Membrane formed - Decidua  
capsula & reflexa - Structure & ovum - Some  
be found to discover that it exists in viviparous -  
is now universally admitted - Union most firm - Vesicu-  
la alba - mucous bladder with duct & canal thing  
Nostrum - runs whole length & strong - The man  
unknown to me since some medical history  
Chorio - fleshy & vascular - great divisions as con-  
tinuous - Shows they & formed in Mesone.

Dr. Gibson. Monday, Dec 6: 1819.  
 Abscess under the Fascia Lata. Mr. evacuates the  
 matter easily. Hip Joint dis. to be fixed by it. Sh<sup>d</sup>  
 make but small incision to prevent extensive infl.  
 Case by Charles Hall - Made deep incision & was the mat-  
 ter. on the bone w<sup>h</sup> had become carious - The discom-  
 not infl. Child for 6-14 yrs. most subject to it.  
 & fluctuation arising in depth & matter - & travels along  
 the limb. Patient in bed - Cut down as speedily as  
 possible - & deep - the outer part best - Introd. tents -  
 & incisions to excite granulations - in some cases  
 we are impet, require wine & cover. Spth. Temp.  
 Cured one case by issues.

Psoas or Lumbar Abscess. It fr in the coming  
 freq in E. B & S. C. Males & adults in freq. - It com-  
 mence & commencement, lameness, but increases when  
 much matter collects - but permanent lameness en-  
 sues - Psoas muscles to be cut off to perf. & then  
 liable to opening & the dis. arise a freq from spine  
 but no off cause - cold, damp sheets, wet ground.  
 Matter also occup. one situation behind pector.  
 & cellular coat. Matter travels in Pso muscle -  
 & runs down the thigh under the fascia lata.



Paronychia - Permeum - abscess femoral hernia -

The matter is confined in a cyst & secreted in large quantities - inflame & death. Sometimes opens & matter disch & death follows from irritation. At 1" matter is good, but at end foetid & flaky - best not to dis or not, but excise & crumble - but, round. Detachable oral substance is never diseased - Mrs Howship -

Some suppose cancer a cause but Dr Gibs sup it a consequence of supp ure - Mr. Aber in the 1" condense free incision. I saw a small surface under the skin 2 openings - 1 a cyst the other - the skin - Matter slowly disch & upper part unites - It? also unites the opening & 1" intention - When only small quantity in b dis - in no direct opening & heal in 1" inten - but - is not open at all - Crowther blisters & dress with Savin oint -

Paronychia or Whitlow - abscess ends a finger - different species - All treat gen - in common - is into 4 spec - 1" Under the cuticle - occup the area in root a nail, but new nail formed - when under the nail very painful - & comes in soon as the matter is disch - 2 spec occup the adif the

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found to end a finger - 3<sup>d</sup> Spec - a Sheath -  
Flexor tendons - Must recollect situation & flexor mus-  
cles - Infl extend & fore arm & arm - Matter in  
the hand - Matter quickly extends under the annula-  
ligament - & around quadr & flex muscles - Abs-  
s & forearm elbow joint; & for fore arm - 4<sup>th</sup> Spec  
set under the pericost - & rest bone - Fever, Spasm  
& delir - a convey - two last spec - & last no pain  
& internal coagula - Same treatment - At low diet.  
Warm water, & Dec of Vin L & Ured - When  
Matter, poultices & matter evacuated - Resolves  
recommenced open - a very commencement - In the  
3<sup>d</sup> Spec, matter is not easily discovered, in the fore  
joint - M<sup>d</sup> in incision & a Sheath & ulnar - 2<sup>d</sup> Spec  
a finger with direct & history - M<sup>d</sup> not divided  
the annula - ligaments unlap to some use - a  
life - Petit Leaden - Deep M<sup>d</sup> to skin - injest of  
Mergat & oak bark - or lint dipped in them -  
M<sup>d</sup> in 4<sup>th</sup> Spec - the same - Continues finger  
destroyed - Soft soap, cannot poultice, blisters  
round the finger or cut red pin at other end of it.  
When bone discovered no opportunity.



Of Ulcers. All parts liable to ulcer - but parts  
more prone - Extremes more prone - & proportionally distance  
from the heart - & young - In specific Ulcers. It dist<sup>n</sup> &  
crisis is not affected & distance - Cancer - Ulcer  
may arise from a variety of causes - consequent to wounds -  
In some cases no apparent cause - but: for tumors of  
long standing - specific dis is gen<sup>l</sup> produced, viz Cancer  
& Scrophulous - Depend upon the seat & most act -  
Always a secondary disease if cancer & system -  
cancerous ulc is to prod - The frequent causes are  
wounds, blows, &c. - ~~When~~ Secondary causes also orig<sup>n</sup>  
in the system - healthy local m<sup>t</sup> - Illustr<sup>n</sup> - Drunk  
old recent wound, ulceration of an old wound to be cured  
as the most not exceed the health - The efficient  
cures of Ulcer or of a second sort - Ulcer depen<sup>d</sup>  
up<sup>n</sup> situation - Dangerous when near large vessels -  
Also & penis - to be prod for destr<sup>n</sup> warts - Specific  
Ulcers in danger unless specific disease destroyed  
The danger wh<sup>n</sup> in an unhealthy constitution - Sometimes  
infl<sup>n</sup> & great - In some constit<sup>n</sup>: continue very long -  
& many suff<sup>r</sup> long to heal old Ulcers, by prod<sup>n</sup>  
det<sup>n</sup> to the parts - Mr. Hume - Gout -

110 As a general principle more depends to heal also  
it to heal them - Tent Ulcers, say have recourse  
to a great ext - & when over the fascia in extensive  
as points will not heal over them, as in dead bone  
Clashes - In supp all ulcers alike, except from  
specific dis action. But the so diff & c to divided  
into distinct classes. & //

3 Classes - 1<sup>st</sup> Class - <sup>10 species</sup> Healthy - 2<sup>nd</sup> Unhealthy 3<sup>rd</sup>  
Specific - 1 one sp - 2<sup>nd</sup> 4 1/2 sp - is hunt 2 in add  
3<sup>rd</sup> in ~~unhealthy~~ 4 various - 3<sup>rd</sup> C. camp - every ulcer  
arising from morbid poison or ven - Puer - &c.

D. Hare - Thursday -

Hare always communicates repulsion to the bodies  
to which is applied - Elastic bodies owing to heat.  
Discovery of gases not in the one - D. Black in inves-  
tig the constancy of bodies found the other gases exist  
besides the other air - He found a peculiar air  
depriving alkalies & caustics of causticity - This re-  
solved the film rays of Mether plan - He found this  
air obnoxious to life & simple of its composition, But  
D. Priestly from red Acid procured a more re-  
pulsive gas - also in before for the telluric  
oxide & Nitre. In last quantity & it -



When we collect it in great quantities & not as  
from a syringe in a bottle for studies - Owing to <sup>the</sup> the  
letting gases escape a correct principle of bodies  
rem undiscovered - Pneumatics wrong - Water  
& mercury - When <sup>in air</sup> water & water is supported  
at nearly 13 times greater height than mercury -  
Lavoisier & Berzelius contrivances for operating with  
large quantities of gas - It was soon discovered that  
atmos air is comp of 2 differing gases - One fatal, the  
other sustaining animal life - Substances which &  
most vivaciously give the greatest quantity of light  
when that smoke is consumed by giving an addit  
ional quantity of oxygen gas - Explosive - Coals, charcoal -  
Phosphorus = 98° Sulphur, boiling water, Charcoal 800°  
Iron combustible in oxygen gas - When ignited iron  
falls in water it creates so much steam, that  
instead of going immediately to bottom, it rolls about  
the surface & - Carbonic <sup>acid</sup> was then found to be  
produced by combustion - Theory of Combustion  
of Lavoisier - Present appl - Heat comes from  
the supporter & light from the combustible - Explosive  
Combustion of Charcoal - Bulk is not diminished  
Carbonic acid gas fixed air or from air by per





Placenta of different sizes & not proportionate  
to the size of child - sometimes 2 placenta <sup>113</sup> ~~one~~,  
Cotyledon - No navel string bef the 5<sup>th</sup> month -  
length & cord. The gelatinous matter prevents con-  
striction - The neck being enveloped by cord not  
owing to its being convoluted on the cervix & the  
head passing through. Legions Arteries diff in diff times  
sometimes 200 quarts & 3 falls in one instance -  
Usually 2 parts - yellowish, not gelatinous, not  
tender & meagre - When liquor Arteries coloured  
with blood in suppur the child dead, owing to  
haemorrhage - Tallest, albumen, no mucilage  
but white matter is secreted & chills - Visc Baguelin  
Dewey's Chem - & Early stage 300 - as in prof & chills  
& last 8 & 2 in fac & chills - Some suppose it  
to be urine or calum - but in some cases accept  
oli & superio urithum - Halls, transudation -

Secreted & internal surface & Arteries - Some  
suppose it to secrete the factors - but Abundant  
Mount a Placenta - Use & Arteries is to defend the  
factors & prevent contact & sides & uterus & protect  
it from external injury - In latter stage form the  
dilatation & cervix & Arteries & cord.

114  
When member from right the cord run to  
Washed into the vagina & fatal compression -

D. Gibson Tuesday -

Dif. Authors describe Dif. ulcers. B. Bell -  
Simple Healthy Ulcer - arises from wounds which are  
healed a l<sup>st</sup> union or after inf - can be mild or  
small, in g<sup>o</sup> - granulations - Also a loc ~~is~~ & consists only  
secondarily affected. When it tears, fever, &c but per bone.  
Often f. in time out - sh to suff the no interfering neg  
this is later just but sugg assist see to 1<sup>st</sup> aid re-  
time 2<sup>d</sup> to prevent noxious fowers - Treatment -  
Mildest & in simpl appl best - Stim food too  
much action - Att to 2 things - 1<sup>st</sup> def for ext  
cause 2<sup>d</sup> Prevent compression 2<sup>d</sup> Proper pos-  
i point - To fulfil - It is Turner's creat or sharp  
acute feed - No benefit for dry lint - healed 3 days <sup>with out</sup> soon  
operates as stimulant & adheres too strongly - granu-  
Treatment in to spread on dry lint - Then the compen  
& roller - To fulfil the 2<sup>d</sup> indicat - Bandages or Roller  
to approx sides - When a pledge is - each side -  
Not tight at first - but in after - Adhesions stops  
Int union - B not interfering -



115-  
Of Incurable Ulcer - In diff or const or local causes - Bad constit - incurable ulcer - No characteristic marks by which to judge - Can judge - ext diff alone - Some symptoms - Big ragged stom off - bottom undrained - pale unhealthy gran - Disch is thin serum, ichorous, spasmodic effort & pain, free bleed when fungous - granule one dark red when fungous - Flr & var - 1" where gran absorb - 72" when unhealthy or fungous granulations -

Treatment - When const - Const rem to be simpl - As in c. in ulcer take the rest, in try diff remedies - Some rec properly to med it to simpl & idea that the ulcer is incurable so that no time be lost - Best plan - 1" Lay down a rule for Const effect - Stomach is full & must improve & can be cured until it is attended to - Best plan is rest or purgation - Later best in milk doses & freq - Aft vom: R of Opium or fewer better to Spt R - Cicuta useful - Local application - 1" Warmth in sev ways - poultice & fow & steam - Poult of bread & milk best - But acct of Lead or acct of poppy lead can be added - But acct of Opium or acct of lead can be used

"6 May continue the poultice as it is it gives  
a ulcer - When from bee large discom-  
fort of Chomacilla de - Steam of warm  
water useful - But tendency to mortify.  
Med L L and a dry foam - Pulv Carbon -  
2 grains - & 3° Lapis Calamine - Carbon but  
bit dirty - But scrub out skin - But for  
open and alone - Pulv Lapis Calamine - can  
be used dry or mixed with ointment - Avoid Bagg  
after - to refresh fump Pulv Rhen - 100 grains.  
Nitrat de Corros Sublim - When too in  
fungous Escharotics - Blue vit - red pers.  
Madage. painful -

Languid Ulcer. Large insinuated granulation  
white - Just slough or gran absorbed - After  
absorp it is red heal - The for a few or  
Local affection - Feeble constit & poor in sub-  
ject to it - Also in Albus House - etc usually  
arises fr. Constet causes - The for 2. lower  
extrem - Treatment - Tonics & stimulating off  
in uref - Wine ston & bowel & the good diet.  
Bee de - More poultices for clams at 1. & then



117  
stem applic - Decoct of  $\text{Zi}^{\text{a}}$   $\text{L}^{\text{a}}$  by ac oak bark  
very useful - 1<sup>st</sup> Powder Chalk & Calam - put in  
suff stem - Palo Rhei extol by Home - find it the  
best application - Sprinkles & the dress of corn ointment  
D. P. L used it but no decid benefit, but is also - As a  
for appl usef - Opium used with usef - Palo Colocant -  
usef, & in h. <sup>some</sup> usef - Dry Lent. usef & h. to put  
away forest - Cannot poultice also not mixed with  
yeast - D. P. uses Carb. Trevis & is improving by benefit  
- One part a powder - mixt w/ parts Basilicon - Precip  
Cress in a best renewed - & Adhesive Straps -  
Baynton - Series prepare the edges approx -  
to be apply by roller -

Indolent Ulcer - Definition - surface uniform  
& cool in con of lymph - dried both part & skin -  
edges hard that bluish & red - not coagulated  
lymph comes - Causes, interper, ugel & flesh -  
Ind Ulcers in cam of all ulcers - Treatment -  
Stimulating - Steam of Warm Water - Cloths dip  
in Warm water - Nitric, Citric & Vitr L & acid  
Nitric L & dil 1 pt. acid. a 10 grains - Vid. some  
Cavities resemble central form on the surface -

<sup>118</sup>  
Dr. I never find the lam - as describ'd by Haines.  
Thinks A. acid no benefit to any of them -  
After 1 or 2 app. to put her in sensible & in  
then give the quantity of water - drink at least.  
Saltp. acid in 10 jabs - Dilute lemon juice  
useful - Pasture juice sent by Dr. Parryson -  
useful - When these dip in water or Saltp.  
Juice or when Loxia useful - as wash.  
Capsicum pepper recom'd by Haines - Extract juice  
pod of pepper, used in W. Indies - Walnut juice  
useful - Steam ointment Basil & red precip  
or Caps. Annamaria - When highly it. Put  
Self in Alcohol also Camph. in 6 wks.  
Why Hydraz. Nitr. best w/ of long standing in -  
strong at first - Other: Steaps & B and Cys.  
in heracitable Leds it in any other ulcer.

Dr. Have Tuesday Dec. 4. 1819. 12 o'clock.

Quicksilver scan of forged iron with Gambrel very  
easily procured & much the best mode of preparing  
oxygen gas - a long London tube useful to convey it  
save the necessity of joints - Homburg's Pyroph.  
1 part Pulverized Alum, 2 parts pearl ash  $1\frac{3}{4}$  Lampblack.



119

The rationale is the decomposition of pearl ash - forming  
sulphuret of potassium - Effluent Combustion of  
Phosph. in oxygen gas - Precipitating lime water by  
carbonic acid - Eudiometry or the measurement  
of gases - - When duly heated Phosphorus also  
takes away <sup>all the</sup> oxygen from mixture or when com-  
bined - 2 Modes of analyzing oxygen - by Phosphorus -  
By slow & quick combustion - Phosphorus has an  
affinity for oxygen - Thursday its lectures

D. Gibbon Friday Dec<sup>r</sup> 10<sup>th</sup> 1819.

of CANCER. Under its various aff<sup>s</sup> & mod<sup>s</sup>.  
Incidents suff<sup>r</sup> present a crab - from roots & filaments  
proceeding & body - Heister? The appellation is erroneous  
as it never resembles crab & L<sup>y</sup> in roots & filaments -  
Carcinoma by no means - True character too obscure  
to admit of correct definition - See History of Cancer  
1 Symp<sup>t</sup> to 2 Causes & 3<sup>d</sup> Remedies -  
1 Gen<sup>l</sup> principle - cancer & its asc<sup>t</sup> except in glands  
obscure - but, first, best is to draw it off from canals -  
Whenever seated in glands, runs in rapidly - Cancer  
gen<sup>l</sup> aff<sup>s</sup> a gland & its form & time, increases  
slowly, as abdominal pain increased, but violent,

120  
about times dull heavy shooting pains, the  
pains recur until infl net is excited, & it  
also happens - Prior to infl it is mov-  
able, but no after - All sub-contraction &  
becomes diminished, dark leaden colour, this  
net contain it for years, but when infl  
comes on, soon runs to suppuration - clots  
of small abs - yellowish & thin matter -  
in great tend to spread - when abscess open  
it only few discharges, hard & callous it is called  
open - 1<sup>st</sup> spreads downward & laterally, margin  
ragged & elev, fungous growth out of dark br  
& chocolate col & shining aspect, vessels shoot out  
purple or blue, here met the glan fungous -  
slightest touch ind here - the Ulcer is at 1<sup>st</sup>  
painful, but aft. ext a second growth, gran-  
ul pale flabby & indist - & in add it fung.  
conical, margin elev & ragged, then surround the  
a Nature & Cause of Cancer, Prox cause is  
obscure, other writers suff the understand it.  
A new Pathol, viscosity & fluids - B. Bell - attribute  
a parts - others annihilation dispersed the? the sub.



121

D. Adams suff. Hydatids wh. in a solid p<sup>o</sup>ndance  
cancer - counts to common sense - upon dissecting  
Hydatids - Sometimes distinct bags or cysts in fluid, & in  
hydatids. has confounded them - Cause of Cancer is  
obscure - better to say it arises fr some un-  
known cause - Still disputed whether constitutional or local  
Mr. Hume properly has proven the latter - Cancer not  
affected but sympathetically or after considerable  
Disease & is felt upon dist parts at same time  
but propag its infl to surrounding parts & in time  
the bee local & diseased. Consent of parts, thus it  
runs a nervous syst - & when one breast is injured  
the other is bee sympt aff - also uterus & breast  
Some say arise in 2 pl at same time - But see  
I am pl<sup>g</sup> for its origin & if 2 parts become aff  
it is from the infl by a similar const  
affect - Cancer arises from specif dis action  
& in parts in bee aff at same time - My opinion  
is that it is a local disease - if dis it were dis  
a wh fluids, all gland parts sh<sup>d</sup> dis & ext<sup>d</sup>  
in case it - Ext<sup>d</sup> or entirely rem the dis &  
is the strongest evid of its local - That so ext<sup>d</sup>

122  
few that can't get at some safe &  
it is hereditary - but if local, herid transmiss  
can take place. But wh d the dis occur  
so w many in same family - Mr. Home ex-  
plain very satisf - vide Home - Child recent  
parents & did a same cause & offer same  
dis - in some families he says, gonorrhoea -  
other syph. some stricture, but can't called  
herid, as it is local - in this way dis not  
hereditary - breasts of few not so similar  
th th same dis not induced - vide Home & Cas-  
son, but - also Poirson

Exciting Causes - The fur - Ext violence &  
every irritation - later syph. can act as exciting  
cause. Diapnotic - Conf w scroful - Henry  
hem & Syphilis - Scrof node is rapidly  
left pain, scrof beatter is, when ulcer, with &  
rounded & regular, gran large - In cancer  
ragged, irritating matter, fung, large & bleeding.  
Venous Hemorrhoids - is soft & elastic, & fluctuant -  
all liver, lungs, Kidn, & sple, fung few find in  
young people, when ulcerates very peculiar -



Only 6 Conf W Syphilis & Ulcer state - <sup>123</sup>  
Showing new diseases - of The Peculiarity of  
Structure in Cancer - Scirrhous tumor is firm  
solid & indurated, when cut 2 parts, 1 solid  
& fibr greater parts, 2 cellular, centre is solid  
& fibr hard rays running a circumference -  
also cross bands rec art vites - This is the 1<sup>st</sup>  
stage, after fibrous text is soft, fluid, when it is  
further it is cont in cysts, dark, br, & ch -  
black bluish & not green - not filled up  
by fungus - Ulcer comm - center - skin ult  
rest, & cauliflower fungus projects.

Dr Hare Friday Dec. 10<sup>th</sup> 1819.

Eudiometry. Began with D. Priestly & with the  
dissos made by him & D. Berdick - D. B. used  
lime water to any air containing carb acid - D.  
Priestly disc it w<sup>th</sup> vitric Acid & poured on  
copp & gas was obt wh when combined with  
oxygen produced Nitrous acid - But little so varied  
as they combine in differ deyr. Mr Dalton  
alone still adheres to this plan - It operates with  
more speed. Vide Henry - Rem by Dalton. Jan 21. 1820.

<sup>126</sup>Exp. Tube 31 measures of Atm air - 10 measures  
of vitreous gas - to ~~are~~ 4 measures disapp.  
in Atm air - Therefore 14 parts absorbed - If 15 parts  
had disapp. 5 H & oxygen - or 10/27 - disappearing.

Exp. Sulphuret of Lime - absorbs oxygen rapidly  
from Atm, forms Sulphate of Lime & precip.

How prep. A tube with a large globular extremity  
& tube divided into diff parts by equal measures  
of mercury - When air introduced into air  
there turns it up so the absorption takes place, &  
open it under water & the water which enters  
will equal with the air absorbed.  $\frac{1}{5}$ !!

Next book recommends a gum elastic bag, & tube  
containing sulphuret of lime - can be fastened  
by thread without another tube. Dr. Hope's End.  
tube & stopple - to admit the water after absorp.  
Pneumatic Indian - Lamp - &c - But here  
renders it inaccurate owing to elasticity  
by heat - Must stand & know & them.

It<sup>o</sup> being it a same temp - when finished  
as when commenced - Phosphorus used.  
by fusing the phosphorus over mercury - Object



dangerous, troublesome & dirty - New Endoneth<sup>195</sup>  
Tube having steel wire introd into one end  
& tube - & by having a very small orifice at the  
other end - the air only will enter when the  
wire is withdrawn - The wire sh<sup>d</sup> be graduated  
as the bulk of air will only equal the bulk of  
wire - Tubes for exploding oxygen & hydrogen -  
liable to inaccuracy when transferring the gases -  
No where tube preferable - Thought oxygen gas is  
not condensable per se, yet become condensed  
wh mixed w other bodies - Nitrogen gas has less  
affinity than oxygen to other condensable mat-  
ter - Thus ignited coal is ext<sup>r</sup> in it - the ni-  
trogen exists in comb w coal - Thus eff<sup>r</sup> arising  
is its affinity for caloric - only combines in  
its nascent - Can it unite w<sup>th</sup> it form of  
Nitric - find a West Country & caves where water  
is excluded - Oxygen & Nit<sup>r</sup> comb in an un-  
known way the Nit<sup>r</sup> carries w<sup>th</sup> it its caloric &  
thus the heat during the comb of nitric - It also  
enters into <sup>the</sup> composition of fulmin powder -  
Sol<sup>d</sup> sil<sup>ic</sup> &c cause them proper to Nitrogen -

126 Nitrogen is a constituent of flesh & still an  
essential how it is suppl to animals who  
live upon veg. sh. I can't say - Except  
I have found to oxygen universally producing acidity.  
As chlorine possesses the prop of oxyg. it is prop  
to treat of them together.

Chlorine sup. combustions, but its importan  
is very small as it is situated in an opposite  
character & thus. Infl. the of oxy into Hyd. & Phos.  
These app. to be substances which possess exactly  
opposite properties thus oxygen & hydrogen, <sup>in water</sup> No similar  
Class oxygen Chlorine iodine & hydrogen are  
one family.

Chlorine is a sup. life, & no less a brack  
it is a second w. inf. - for its active delect  
prop, produce infl, has a yellowish green  
color,  $2\frac{1}{2}$  times heavier than common air, produces  
a sensation of warmth, when the hand is immer  
sed in it; similar to some extent a mouth.  
Viewing it as a simple body it w. seem to  
be a better supporter of combustion as bodies  
need to be heated to take fire, becomes infl.



127  
vegetables could press to it & combine with  
water, destroy colour & used in bleaching  
though the presence of moisture is necessary for  
similar in this respect to light, which disposes  
the oxygen & water to combine & colouring  
matter & vegetable - & Chlor comb & Hydrogen -  
Obt - by pouring a Blk oxide of Manganese  
Sulph acid <sup>diluted with its weight of water</sup> - & common salt - Its action is  
a very great hinder to its use - When it comb with  
lime or its alkalies it loses its bleaching  
power, tho its active pow is dim. It is rapidly  
absorb by wat. through increased by  
acids & persues - The watery solution dissolves  
gold & all the metals - <sup>Properties of</sup> Aqua regia is owing to  
Chlorine - In all the processes for gas we  
throw away a portion of gas equal & bulk -  
retort, to prevent contact with atm air -  
Some is an interesting exp in Chem & made  
with this principle but the consider of it in to  
postponed - The gas is to be collected in close  
bottles so that it is to remain stopped up.

D. V. Gibson Monday Dec<sup>r</sup> 13<sup>th</sup> 1879 -

a Remedy w<sup>h</sup> has been proposed & can succeed.  
Many remedies - Jute used & not used to do so.  
It is a constitutional dis- & acute rec by thick  
I see no benefit fr it - tho' it is highly ext<sup>d</sup> by  
others - When benefit is not to be expected in  
cancer - Hyosciamus - not used soon &  
Heml - Rector, unsuccess - Belladonna, &  
Lambert - Rector found it to reduce the size  
a tumor, but eyes became off - H<sup>p</sup> to give a  
smaller dose - a little Rector - Arsenic, Am-  
monia, opium, & Barytes - Arsenic is usu-  
ally given externally - Fibrous used it & inter-  
nally, but no advantage - Mercury & have  
positive & ulcerated stage prod bleeding &c -  
Cupr Nitricol to be used - A little confid is to be  
placed in it.

Local Rem - Various - Carb acid gas -  
Regul & Dr. Levent, Torment - Confid to 1<sup>st</sup> -  
to be conf a Bladder - over the air - Gaster Juice  
in v benefit - Carrot Poult depts the fetor -  
Podo Amb, Creta, Heml, the water, in deacid



good effects. There rem. in b serviceable <sup>129</sup>  
early stage & in b trad. Some rem'd will  
prev in new skin tum. Vt. Loc & J. B.  
Loc best & by dees. Also. Gues. Binegan a  
food. W. b. relates to prev ulceration. Low  
Diet, Pontean 1. the good eff res - pract.

When H rem fail - It only certain cure is  
extirpation. I W. Eschsch & Knife. Old say  
f f or Hem used Esch in Act Cant. Only appear  
It dis & were laid aside a reg. surgeons, still used  
by Knif. L. Caus Arsenic, Comos Sall. se.  
Arsenical caustic best, tho' not violent infl.  
M. Howe W. Arsenic & Sallph a a - Destroy  
any tum. W. & in throw out fungous M. H.  
he used it successfully in several cases. Had eff  
a absorption of Arsenic - Dr. Gibson think these  
tumors were a true cancer. only  
increase the action & hurt. Act. Cant dis.  
and. Differ opin respect it use a Knife  
Dr. Moore. unsuccessful. M. Still diff results  
Mr. Aoth also successful in spec on 102.  
Dr. Moore owing to Phys & Surg distin & it f.

Acute & Home in success. D. G. 26<sup>same by</sup> only  
 lost 4 & return & discuss - without success - the  
 manner of operating - when in other parts  
 returned in frequently - the oper 1<sup>st</sup> to perf.  
 The success & oper - dep & the age, situation.  
 when young, & not good count in part of an  
 in gland parts far. We firmly connect &  
 adjacent parts, painful glandular, & other  
 more - Sh<sup>d</sup> also operate w<sup>th</sup> prob of remo-  
 ving all the adjacent parts. Vide Home -  
 operation - 1<sup>st</sup> remove every bit part & in  
 every aspect say the parts appear diseased - Sh<sup>d</sup>  
 not hesitate to cut into sound parts. Sh<sup>d</sup> also  
 as in skin as possible as the skin is in disea-  
 & incision to be made, to include an oval space  
 & centre, & not too much, as we fear closure.  
 Sh<sup>d</sup> Dissect it & direct & subj measure at fib.  
 3<sup>rd</sup> Remove all the vessels w<sup>th</sup> cut. To prevent  
 Hemorrhage, no vessels are left to retract -  
 Of Partic Cancer - & 1<sup>st</sup> Cutaneous - & so  
 every part, in limb & face, back & extrem.  
 Some suff lip, pref & now of this oper-



131

Gen commences a pruple or wart - cut in Chagay  
Cutter Can - hard, unyielding & in pain, w<sup>th</sup>  
swelling soft & in pain - scaly & raw surf -  
w<sup>th</sup> ulcer established, thin, fetid, sanguous disch -  
aged persons are liable - Old women are subj<sup>ct</sup>  
w<sup>th</sup> is conf in Lulus & old der - Disting - Lu -  
pus, in pen, in rapid & in size at the surf -  
not colored & yellow tinge & attracts eyes persons, is in specific  
diffem ~ Cut Cancer is w<sup>th</sup> Knife - diff to save  
skin - then rem by double oval incision & rem  
all the hardness or cancer - w<sup>th</sup> conf - w<sup>th</sup> 1 pl -  
eyelids - hands & torsus - or lining mem<sup>br</sup>  
in lids & rec cut cancer, trouble & dang -  
diff to ext, sine ducts w<sup>th</sup> w<sup>th</sup> lid, pref to der  
Carcinoma Sackey - but der - enlarges & fungous  
size - Walnut size extirpate leaf & large size  
Cancer - Lip - Old persons & lower lip - the  
supp for smoking pipe - B in foundat - great  
mobile in eff it to in inj & rend it in 1000  
when deep & substance, or superf, pump hard to  
Bony, projects - lip, most round & pol, col  
purple, sup w<sup>th</sup> red or chocolate - but light  
red fungous -

The extemp. could not - subst. ship -  
 Oper - in to Barclay - various recent V  
 secure vessels

D. Hare -

The discovery & condensation of Chlorine broke down  
 the diff. betw. gases & fluids - & now only retained  
 for the purpose of convenience - Another dist. &  
 more imp. wh. it is broken down is that oxy-  
 gen was the sole ~~and~~ supporter of combustion

Chlorine is an equal good if a super-suffocate  
 some whilst not requiring to be heated. Expl.

Expl. of gold leaf - Bleaching - Gas condenses  
 at 40° yet a sensation of warmth is prod  
 by it - When perfectly dry do not bleach  
 but only wh. carb. it water - & owing -

separation of water - Expl. of Woulfe's App.

a great improvement in Chem - marked a new  
 era in Science. Very troublesome, however, & have

adopted 1 more more convenient. viz. 2 conc.  
 outer glass & a bell <sup>& receiver permanently united</sup> shaped tube, - having  
 beneath them 3 concentric jars. By fixing the  
 receiver & retort to gas paper down a central



133

glass & forces out the water into the 2<sup>d</sup> glass & is  
on to the 3<sup>d</sup>. By having in the last glass a solu-  
tion of an alkali the chlorine is prevented from  
passing into the air - Berthollet 1<sup>st</sup> appl it to  
bleaching but owing to bad smell, must con-  
sume a solution of potash or what is cheaper  
lime - it destroys the smell but not the active  
or bleaching properties. Besides chlorine as a  
supporter of combustion it & the carbon - not  
& placed at diff expts - Sulph or Hydrog at one  
& oxygen & other - Iodine is a salt recently  
discovered - It is found in mass of soda in the  
mother waters of this alkali - from barilla  
or sea weed or Kelp of commerce - French Kelp  
is cultivated on a large scale to obt the Sub-Carb  
Soda, aft all the crystallizable salt is obtained  
the iodine rem in water & is obtained by adding  
sulphuric acid - recent chlorine - both form  
acids, by uniting with Hydrogen & oxygen  
Iodine is remarkable for its beautif col wh in  
state of gas - Henry 2<sup>d</sup> also have seen iodine  
to the same result with chlorine - when heated

has a beautiful purplish red colour - when  
cold condenses into a <sup>hard</sup> dark brittle substance.

It is well to use the term of supporter of combustion, but dep upon the quantity in whom  
is communicated to the other - by getting oxygen  
into hydrogen, the latter might be called a  
supporter of combustion - & vice versa &  
this is applicable to all similar substances  
Sulphur leaf w<sup>d</sup> be burnt a vapour of Sulphur.

Iodine h<sup>t</sup> curious property of opening a  
purple colour with starch & this has rendered  
starch a test for iodine - Iodo Hydriodic  
acid bears the same relation to iodine as  
Muriatic acid h<sup>t</sup> to Chlorine - produced  
by comb<sup>n</sup> w<sup>th</sup> hydrogen - Exp - Starch & Hydriodic  
acid. Exp combust if Phosph<sup>r</sup> in Chlorine  
a concrete acid formed (I suppose - Ph & H<sup>2</sup> & H<sup>2</sup>O)  
Most interesting & useful combination is w<sup>th</sup> Chlorine,  
of Potash, forming rocket light, when mixed  
w<sup>th</sup> sulphur or sugar or any combustible subst.  
& combined w<sup>th</sup> sulph<sup>r</sup> acid. Analogous w<sup>th</sup>  
iodine is a substance found in flower of iron



135.  
altho' it can be obtained per se & is therefore  
not prop. to speak of it when spk of a th  
comb of Iodine - By pouring sulph acid  
on flour upon a leaden retort an acid is obt  
'analogous to Hydroiodic & Muriatic acid -  
This used externally, the skin, corrodes, flaps,  
& is used as a test in etching up glass -

Dr Gibson.

Canceroides - by Albert 2 species - Cylind & Ovalar -  
1. att around shoulders & under thighs, att fashionable  
ladies in connection w/ syphilis - pale rose colour,  
umbiliciform, white lines, & small projections on  
surface - Ovalar att the breast - & freq in milk  
among negroes, attacks the lobe near, for moving breast  
causing - Extirp one & back took up 25 arteries  
very vascular, & new in it in Whites -  
Others says incurable, but Dr Gib's extirp suc-  
cessful - Whit - says occult -

Cancer - Eye, formed of fetal, old & young,  
in freq in old persons - M. commence in 2 parts -  
either in Retina or Cornea - for - Retina.

136. Globe & eye enlarges. sometimes resembles  
for Anomalous. La silvery appearance, adv.  
forward & iris & then vision is entirely destroyed.  
adheses & iris - comes so. The Prog is diff  
in differ subject - but 2 or 3 weeks - the 4 or  
5 months. The reaches to cornea, fingers.  
Extirpated twice - Not frequent in this country.  
Care - & dis it & return of optic nerve - cold  
exciting cause - either red, or brown chocolate  
colour - with red vessels. No applications, unuf.  
The crown spec is best to better, when the white  
silvery metallic subst is formed or seen it<sup>d</sup> to  
ext<sup>d</sup>. Sometimes extends for the back into the  
brain. Sh<sup>d</sup> extirp whenever finger just a corner.  
Sh<sup>d</sup> separate the angles or cartil<sup>d</sup> & eye for each  
ott. Sh<sup>d</sup> then cut the straight muscles, to  
~~draw out the eye~~ - Not draw too far, & disturb  
the optic nerves, best to introv scalpel & divide  
I divided the optic nerve with sharp scissors in  
both cases - When it I succeed owing to in.  
fl after a brain - To prevent hernia or file  
the orbit or l<sup>id</sup>, in 2 or 3 days profuse supp



134  
take place - granulations fill up the orbit. - Have  
returned in my experience.

Cancer - Tongue - It freq. - in tumours  
called cancer - Some discharges arise - Some -  
some so rapid tooth, cure it by filing the tooth  
where small lump arise - Subst & tongue, inen-  
able, horny, & impedes deglut, in attend to it.  
Fine purgatives &c. - No benefit in exposure &  
operation removal - Some recommends in new  
operation, Ligatures - Suff it in to appl line  
injuring the texture, no danger for hemorrh.  
Case J. Gray - Capped need w double lig. It is subst  
& tongue & tied on each side. <sup>Sometimes occasional salivation</sup> - Per success w  
tumour not too large - also cured by English-  
needle & long journal - Operat. Double lig.  
When knife used, in return & also hem. - w  
in every instance w to profuse - except a very  
extrem - W. have the actual cautery at hand.  
Case Touril - Knife & saved by actual cautery.  
W. 1<sup>st</sup> was inter rem half open, as tumour to  
scrofulous -

Cancer - Breast - Gray in the count. - 2 or 3 dig

198 forms. 1<sup>st</sup> is vicinity a nodule, small tumor  
2 other cases numerous lumps of this nodule  
most for a single lump. for gland has only  
8 units to others. - It is in old & y persons.  
freq in w <sup>some</sup> many children, also old men.  
also bef 15 - connects w menst. - Most  
form is Att wh att old persons. at 40 or 50.

Exiting cause pressure clothes - Symptoms -  
Hard tumor, & pain wh it is moved  
Largest exists a long while bef discov. But  
tumor arise a few days wh catarrh suppressed.  
wh pain in stiff not specif or dangerous.  
Treated by local appl - leeches, Acet & lead  
ointment & not w out rem it - or a Serrine  
plaster Logan's or Macky's removes the tumor  
very speedily, low diet & abso infl.

When still contin, lancinating pain to be  
operate & extirp the lump. best at 1<sup>st</sup> as the  
breast is not injured. - When the tumor is  
very small, nicking wnt to be cut it turn  
on itself. - B when larger, extirp by operate.  
When tumor blood, cancerous & connected w



Pectoral muscle - wh. shivelled & contracted  
 adhering ~ Pect. muscle, ruffle shrunk into  
 the breast - Worst kind - When tumor deep  
 seates glands & axilla affected - Wh. glands &  
 discaised & intercostal spaces unsucessful to  
 operate - Wh. Operation, recumbent or seated,  
 later best, secure Arms, one arm held out  
 to stretch pect. muscles, 2 incis, above & bel  
 the lower incision 1", high & arm pit to 2  
 inches below the tumor, upper incis com  
 mence & the other & extend below 2 inches -  
 then dip to low part & tumor, & see the  
 arteries, before cutting them, & tie them -  
 if cut V<sup>o</sup> prof. Lem - cut & laye - but no  
 art espec in young persons - Sh. alw either  
 secure w/ w/ or incised aft. ligare cut -  
 When the tumor is dissected use it as a handle  
 to draw down the glands - cut off all dis  
 parts & glands - When not extensive in cut  
 off the tumor & first cut the glands & look -  
 & cut them off - Sh. see every part -  
 after the operation - secure w/ edges by w/ & straps -

140 H<sup>2</sup> leaves space to discol matter - H<sup>2</sup> be  
careful ~~to~~ not to injure the veins - be caref  
in to leave sponges too long - free, air -

Dr. Hale. Tuesday Decr 14<sup>th</sup> 1819.

Tube of safety. Although Chlorine impairs the  
sensation of heat & hand, the thermometer is  
not much affected by it. Perhaps if a Gas  
Differential Thermometer is affected by it.

Atmospheric Air - Supposes that oxygen &  
Nitrogen in this composition have each a separ-  
ate atmosphere of caloric, but that in these  
compounds the binary, ternary, or quatern-  
has each its separate atmosphere of caloric.  
Atmosph air is not a subject of interest collectively  
considered, but when chemically or separately  
considered very important -

New barometer - <sup>Graduated</sup> Tube - from elastic bag, with  
2 valves - one opening for the tube into the bag the  
other into the bag into the air - Thus every time  
the bag is compressed it operates as a pump & draws  
a portion of air for the tube - Exp. - filled  
the bulb & tube with sulphuret of lime up to  
naught - then by introducing a given quantity



of atmospheric air in the quantity of oxygen. 146.  
One be ascertained & also the remaining impurities  
Oxygen & Sulphuret of Lime is that it does not  
act quickly but very slowly. owing to the formation  
of sulphate of lime on the surface & preventing  
the further absorption of air. Sulphur & Iron  
filings will also acidify.

Hydrogen Gas - Whenever there is flame it is  
formed by Hydrogen. Obt by <sup>adding</sup> Sulphuric acid  
to <sup>Water</sup> Sulphuric acid to Iron <sup>or Lime</sup> - Muriatic acid  
will also produce it in a colder temperature  
Hare's Method - A small tray in a shallow vessel  
of copper - insert over it a bell glass & tubes -  
Also made by passing vapour of water over iron  
filings heated in a gun barrel - Hydrogen has a  
perceptible smell - Its density is one of its most  
remarkable property - 100 gr 2 1/2. 12 times lighter  
than atmospheric air - Employed on this account  
to raise balloons - Extinguishes flame - Gay Lussac's  
method or apparatus very useful - Called  
his own infer (Hare's) the best as it is procured  
by the process in atmosphere - Expt Manchester

Dr. James - Wednesday Jan<sup>y</sup> 15 -  
 1. Mammaries - 5 Claps - 1 Redundant -  
 2 Deficient - 3 Misplaced - from a cont  
 4 Complex or Anomalous & Hybridous.  
 5 Nipples -  
 Causes & 1. Respiration - see previous.  
 1<sup>st</sup> Some say drawing & expelling of col  
 of air - But would take pl & still born.  
 2<sup>nd</sup> Owing to change & circulation - Death of  
 But death by no action -  
 3<sup>rd</sup> Sensation of Cold - in body & child - but expir  
 before air expelled & also in Africa temp -  
 4<sup>th</sup> a Sensation of Pain & Push - at the Pelvis.  
 Disproves a Cesarean operation, no pain.  
 Thinks the air appl & face strain - inter  
 costal removal & death - Proof - Inter  
 the de Death necessary - 2<sup>nd</sup> Breaths as soon  
 as face expelled & does not until mem  
 branes & within a face - 3<sup>rd</sup> When Resus  
 minal & more - 4<sup>th</sup> Strain & face excite resp.  
 Thinks the foetus in Uter sensible - Struggles  
 in feet presentation - Child starts when cold hand  
 is appl & abdomen - <sup>also in turning the child in uterus.</sup> Child is free in a contracted  
 state & escape as it might by strugg rupts  
 the membrane -



143  
Nourishment - foetus - Drawn from the mother -  
no matter how transmitted - Proven by madder  
col bones & foetus - Hemorrhage & Placenta kills  
the mother - & Uterine hem the foetus - Do serious  
fluids alone conveyed & foetus & mother? but  
D. Farmer thinks red blood passes & foetus -  
2 gen - opinions - 1<sup>st</sup> formed circular & 2<sup>nd</sup>  
Mediate - Proven by J. Hunter that the blood is def-  
& Uterine art & cells & Placenta - Conf by Dubois  
Exp - Ground Uter inject & crural art - & inner  
surf small arteries ramified & spongy part  
& Placenta - only intermingled & not anastomosing.  
Pulsations, not synchronous - Thinks the blood is  
def & cells & Placenta & analogous to lungs - 1<sup>st</sup> Res  
end of Stomach 2 all the BL is dist & Placenta -  
3<sup>rd</sup> Some animals dense red - 4 When congested  
& cold death - & prevented by thick covering -  
5 Bl. accy, florid colour & Umb. vein - vide H & A. B.  
Galler suff by Uterine - nourished the foetus - & says  
all unloft canals contract when no use - & if not used  
the Mesenteric Lactals w<sup>d</sup> close - but it do above the  
Mesenteric & intestines - but inferior foetus - & <sup>formed</sup> mesenteric

144 I furnished & various fluids - surface - the  
Lig Uterini disch fast near uterine - I accepted  
also disch it - Case also where Quodam m  
repeated & stomach - Lig Uterini has a contractile  
properties, see pencil sk. - I also exists in increase  
reaction to the size & factors - Harvini - suff also  
nourished & Lig Uterini - But the organic ac-  
tion & factors but little exercising -  
of Extra-uterine <sup>Conception</sup> Pregnancy - Jud & Ovar  
Hall of H & Cuv - abdomen - The term is impro-  
per - as conception is also in ovar & extra-uterine  
Many proofs that it takes place - Whereas it  
occurs and there is an afflux of blood & chorion  
adheres & surrounding parts - Factors per infer  
3 Species - 1<sup>st</sup> Tubal pregnancy - 2 Ovarian  
& 3<sup>rd</sup> Ventral - always a difference & report not  
nourish the factors - When spermatoc increased  
Tubal, when mesenteric, abdominal or vent.  
Ovarian Lb divided - External & Internal  
Tubal External & Internal - ext uterine & vestib  
or entrance & tube & inter uterine & cavity & tube  
Ext: Tubal & ovar in continuous longer than  
the internal as in room - Cases where the



foetus & tube rare - ovarian most rare. 145  
Whatever impedes it pass & over run pass  
to extra uterine foetation -

Symptoms - Div into Equivocal & Certain -  
but equiv, uncertain - freq lat pains come on  
about 8<sup>th</sup> or 9<sup>th</sup> month - Sometimes the Uterus is  
harm ruptured - only can decide by exam per  
vaginum after 1<sup>st</sup> month - Difficult to disting  
between false tubal ovarian & abdominal -  
In H 2 first the Uterus undergo some alteration -  
Mobility & Uterus greater when & ovary, than & tube -  
Foetus rarely run long than 3 months & tube -  
Mother per dies about the 5<sup>th</sup> month - some exp -  
Patient dies fr hemorrhage - Where the child run  
long & abdomen - the women may again conceive  
Sometimes was by suppuration - Treatment Rallies  
Anodynes &c - Laparotomy, Urine - Perforation  
Gastrostomy - vide Barnes -

D. Gibson Thursday -

Cancer - Penis - occurs - body & glans & prepuce & carap - penis - Most frequent in any experience commences - substance & glans - Prepuce - ragged & ring - surface painful not last - purging & bleeds - slightest touch, gradually increases - sometimes ruptures & becomes indurated & subst & glans -

Glans - grows at one spot - beside the frenum, point & glans - not beside the urethra. Sometimes penis increases but slowly - at other times very fast - & removal necessary - Causes -

External violence - One a sailor - owing to bruise.

S.D. not conf. cancer & Penis with other diseases. -  
 Fratricide Ben Watts - to be removed through ignorance -  
 When prepuce covers the glans, that it opens & exposes the  
 Ben Watts <sup>1 removed by amputation</sup> has a broad base & narrow pedicle -  
 & cancer different - Vide Q. Bell - In Cancer -  
 distinct, solid, hard, tumor lancinating pains - In  
 all cases every visit must remove the penis - but  
 when the point is affected no care in removing -  
 But on L & R success when penis only &  
 Best to take off it one stroke & knife - S.D. not



extends it much as retraction in the place - 147  
Only moderately on the track. See 4 or 5  
antennae are to be taken up. Can easily be seen  
red unless it retracts - & then use warm water.  
When divided are soft but & abundant & need not  
use catheter -

Cancer ~ Scrotum <sup>or Testicle</sup> more common - than can-  
cer ~ Penis - in commencing <sup>covering</sup> ~ Meatus ~ Testis,  
Scrotum, spermatic cord & body ~ Testicle -  
No fig - ~ Scrotum - hard tumor extending inward  
to the subst ~ testicle - & then runs rapidly -

When commences ~ subst ~ testicle itself - & fungous  
cancer does not protrude fungous & thinks it  
differs fr common Cancerous ulcers per can.  
removes ~ sub investing membranes - Now can  
by Lawrence - treated by cutting of fungus, & after  
not necessary to the cure - When the T. is in early  
wh any inter or exten in calc upon success-  
ful oper if it cold is not affected - But wh  
tumor extends within the abdominal ring - operation  
useless - But wh not large, & painful, no fung  
operation is to successful in 9 cases out of 10.

Operation - graft tumor ~ left hand - oval incisions

148  
cut down to the subst. testicle. & apply  
ligature round the cord. examine whether  
hernia exists. when fluids exist open the sac  
& return the intest. protruber. If avoid the  
vas deferens. Home's plan two ligatures, pass  
needle through the subst. & cord & tie one on  
each side - & prevents cord slipping off. When  
occurs from coughing, hernia, when retraction  
takes place must dissect up the scrotum & see  
the vessels. When the cord is tied, can be  
separated & tumor cut out. Then apply 2 or  
3 sticks or wet nothing but pledget of lint  
& bandage. Before operating ascertain if  
it is truly cancerous.

Cancer Scroti or Chemney, Sweeper cancer.  
Pott. occurs in all parts of body. Gardner's says  
he never saw it cure - 1 in 100 - in cancer. It  
occurs in this country & thinks requires not only  
prolonged but removal.

Cancer of Rectum - Is fatal, difficult to re-  
sect - can occur in extra section or high up.  
Allied to stricture of rectum. & often produced  
by long residence to relieve stricture.



Hard tumors, glands affected - Diffie to 149  
disch feces, smut hemorrhage, diarrhoea  
& bowels affected - Sometimes commences as a living  
membran putrefaction. It<sup>d</sup> disting it from  
a tumor w<sup>h</sup> orig<sup>n</sup> a living membran put, with  
broad or narrow base, when not painful, not  
ragged & the fing<sup>r</sup> c. b. passed round the tumor,  
& c. b. forced out & rectum, ~~the~~ place over  
steamy - when protruded, pass a needle through  
the <sup>base</sup> neck & tumor & tie on each side - Sub-  
Piles mistaken for piles - gen external -

But where lumps, ulcers & ragged sores it  
is cancer - & It<sup>d</sup> be alleviated by injections  
of leaden, sometimes glyster are painful &  
then interior solid of firm - It<sup>d</sup> not use lea-  
gions - or sponge tent -

Cancer in Uterus - occurs in adv age - & w<sup>h</sup>  
hard labors & many child<sup>r</sup> - gen commences at  
the cervix & cancerous & ad<sup>j</sup> part - pain in  
uterus thighs & back - acid discharge & v<sup>o</sup> offensive  
Must pass the finger into the cavity & uterus -  
Sometimes can<sup>r</sup> or Syphilitic affections -  
Low diet, quiet recumbent posture, purgative

150 medicines, leeches & issues - useless - for  
fatal - can only relieve the symptoms.  
Pearson appears resigned to low diet - for fatal  
in 1 or 2 <sup>mo.</sup> yrs. Dr Seldan exceeds 4 or 5 yrs.  
Extract L L perf by Dr Seldan - <sup>of Göttingen - 9 years</sup> Aimed to  
disrupt the uterus & bring down.

Dr Hare Thursday Dec<sup>r</sup> 16<sup>th</sup> 1819.

Flame of Hydrogen not visible in bright sunshine  
this proves that oxygen does not give out the light  
in combustion - Charcoal gives out a great deal  
of light when burnt in oxygen - Argand lamp.  
consumes the smoke & ergo gives greater light.  
By mixing turpentine with the Sulphuric <sup>acid</sup> & ~~the~~  
burning the hydrogen, makes it burn with  
much greater light owing to the carbon afford-  
ed by the turpentine - It also renders alcohol  
more luminous - This property is discovered by Han-  
z Water-burner. The reason why flame is  
smoky is because the hydrogen has a greater affinity  
for oxygen than carbon & when the affinities  
are balanced the flame is bright. Hydrogen  
is readily ignited, by flame, by red hot iron, or  
by the electric spark - Hydrogen will not pass



in a state of ignition through a thin metallic tube or hole. Lavoisier also found that the ignition could not be communicated through a very fine wire since the wire constructed the safety lamp for miners &c. - Comparative properties of the gases - Nitrogen greatest affinity for caloric - Hydrogen when combined with oxygen gives out its caloric - but is not in itself inflammable & therefore resembles nitrogen - Chlorine seems to have a secondary character will combine with metals & with carbons - & like <sup>nitrogen</sup> ~~hydrogen~~ carries its caloric into combination - The most powerful explosion compound is the a combination of Chlorine & Nitrogen - I think that there is a matter which has its combinations enters into combinations & becomes solid & the most appreciable by weight is water - Explosion of Heat of Oxygen & Hydrogen - The most remarkable effect of Hydrogen <sup>is</sup> ~~was~~ producing water with oxygen - Lavoisier - 1 vol. H<sub>2</sub> & 2 vol. pure water - This is the synthesis - This analysis is effected by passing water it is heat of 33 By weight 11 parts - of Hydrogen in 100 parts -

Stomach theory - says 11-754 - n 88 - 2<sup>nd</sup> 6. oxygen -

D. Gibson - Friday -

Fungus Hematodes by Spongioid Tumor - Burns  
Medulla, Tricoma by Abernethy. Burns gave the  
f. a. c. i. f. - Dist. from Cancer. Fungus Hem. diff  
from every oth. disease & sometimes diff. from  
it & sometimes has per. hardy & striated, cells cont  
soft matter, fibrous substance comp. it part of parts.  
Strikes radiates & fibrous - when ulceration  
the fiber runs & connects into thin ichorous matter  
& around parts involve - also conf. to cut  
stent a body, & pecul. to its age - But Fungus  
Recent - is large soft cluster & fluctuates,  
no stria but white soft pulpy medulla matter  
cells or clotted blood, also wh. ulcerat. fung. it  
out & increases rapidly, large & dark colored.  
Also appears in organs wh. cancer - not found  
as Liver, Spleen & Lung - not so copious as  
the latter is a greenish purulent matter, & so fun-  
gous, non fatal. But Burns Hem. fatal & is a Dist  
inct dis. 1<sup>st</sup> Mention Where it arises -  
Wardrop - When in the eye the disease existed bef



vision destroyed - & concludes that fever 153.  
hematodes has its origin in the Nervous System -  
But Dr. G. thinks it depends primarily upon a dis-  
coidit & vascular system - Because - The tumor  
commenced rapidly, & after slow, then rapidly,  
sometimes have pulsation - 1" Caused by rupture  
& blood vessel - it is very vascular in its structure -  
& in the center a very vascular organized nucleus  
of the blood vessel & neighborhood in tumor - Some-  
one concludes that it is a dis & vascular system -  
Pott describes a dis & leg owing to vascular origin  
commence said it just new vessel - & in the  
the skin, cartilage hard & seems to coat a fluid  
resting & bone, must make a deep opening -  
& but little discharge, & put death by fever &  
mutilation - & when dissect the foot till not  
w b f dis, the muscles best & bones carious -  
Dr. G. thinks Pott's case a few Fevers seen -  
H. Eye - ball - in a few - in form of a cancer -  
seen at but one eye - but both - 1" dis is ch -  
fused, & in <sup>seen in blue</sup> does not count - commences behind  
& a ret - adv forward & vit hum, in & looks  
ragged, some vessels in to see - & progress

15-4. iris involved & fuses pig thro' it comes  
out of sclerotic - Grows rapidly, ext  
over the cheek, very vascular, bleeds freely, <sup>A. Cooper says the</sup> about  
fluids & red & face has discolored, peculiar to  
early life & lasting in this w fr cancer - &  
thinks Desault confound T.H. w cancer -  
Differ to lasting - S.H. vivan comes & post  
cancer sometimes cut the sides, th? in some cases behind also.  
font. & eye - See H.H. eyes more rapidly  
& attain greater size, purplish yellow col.  
white lines or streaks <sup>differs from cancer. is red or brown</sup> & surface - Med  
allary matter very observable - but <sup>it is</sup> & difficult  
& imp of <sup>in some to discriminate</sup> eyes - In Differt - Wh<sup>th</sup> cont eye  
changed, humor absorb & occup a morbid  
mass & retina - retina lost, discolored mass  
resemble to brain, sometimes diff - brain in  
consistence, colour, also varies, sent black  
w pigist thick, call by Wardrop, & call it  
prod - morbid secretion - black pigment -  
Optic nerve also of little lb affect - is  
altered in colour - sent divided, sent the  
whole nerve is dest or surrounded - nerve  
sent changed - Choroid coat sent changed  
thickened & reddened, sent seen in part



not & in ott parts adheres - The sclerotic 15-5:  
is coat is injured, not to repair when it  
adheres - When the glands & about & dis, they ex-  
hibit the same structure - Treatment  
but one remedy Erysip - & sh. only to be  
early, remove the eye & cellular membra-  
n & what is removed. H. H. ~

- Extremities - Shoulder joint, Hip, & Knee  
oftenest diseased - also character - same sym-  
ptoms History -  
All smaller than 1: disc, var & size & mas-  
sive to the egg, but loose & moveable, <sup>usually</sup> not  
deep seated, but not course deep on the bone  
not covered by aponer effen - not in fascia, soft  
& fluctuating, but conf n mens & increase  
is variable, but stationary or rapid, studded  
w. knots & project, res anticlock, & had sym-  
tom - redn. & for infl precede ulcerat, when  
the pain & purpus, very times & res -  
rayberry, fetid sanies, the large veins  
bec distend & varicose, & coldness & extr-  
for pressure - are generally situated w & aft  
of varicose veins, not dis adv, about gl  
become involved, extend & at last, & dies

156 by Bectia fer - On Dis - Bone capsule  
when cut medullary matter, cellular  
stroma, col not unif, but yellow red  
eff, oft puts res liver, vascular pale flaky,  
& indist, wh abs glands & diff off dissecd  
Sect is H History wh it attack it exten -  
but all efforts to rem - it unavailing -  
But In no instance is extirpation effective  
only remedy is Amputation - I even here to  
thump sometimes see dis - Sh<sup>d</sup> also tell the  
pat<sup>t</sup>, th amp is the only rem - & ev th an fact.  
I have seen many cases - Case - 16 yrs of age -  
Left contour small tum, some pain but incr  
in size & became painful, still inc - aff f  
med aid, intern med & local appl, all failed.  
cyclo genack opened the tumour & blood coagula.  
tumour size a globe, fungous & bectia -  
On Dissect - Tumour involv th greater part an  
elastic, when cut into the tum, the part hard  
& cartilaginous, & very firm, more so than usu  
al - anov & exten - across process, bone rough  
& scab, no capsule & joint, abs glands dissecd  
& involv & mark - Case 2 - Knee joint - slips



a foot while dancing - in a few days much  
swelling, increased slowly, in part exercise & continued  
used gave no relief, in <sup>physicians</sup> supposed cancer  
of the abscess, in scrofulous, and say the puff  
right sweat & hectic - supposed aneurism -  
called in aft 6 years - find the dis involved  
the whole knee - amputated. The limb as high  
as possible - & perfectly recovered - Dr. B. J. J.  
A.D. discovered - Case 3<sup>rd</sup> one lower part a  
thrust - fr. blow - thrust - died - undigested.  
Case 4<sup>th</sup> - one a calf a leg - died under it one of a young  
Case 5<sup>th</sup> Carpenter <sup>back of</sup> hand - cured by amputation -

Dr. Hare. Friday Dec. 17<sup>th</sup> 1819.

In coming to the composition of water we  
come to <sup>1<sup>st</sup></sup> apply a theory. The basis  
of this theory is the <sup>2<sup>nd</sup></sup> particles <sup>or bodies</sup> are indivisible.  
For example - Combination of oxygen & carbon will  
only combine in definite proportions - if not why it?  
The oxygen not experimentally itself with the particles  
of carbon - Only 2 <sup>proportion</sup> of carbon with  
oxygen - 1 Carbonic acid & carb. oxide just 1/2 of it  
if we be - carb. oxy - 45 - 100 - <sup>or acid</sup> - 100 - 200.  
It is & is unite in det. propa - not a compound

158 Same had carbine only from prof-  
at water, ratio by weight as 7.5 to 1.  
D. M. given 8.5 to 1 - Wt 1 to 1 - being - 7 to 2 to  
1 to 3 quarter - Water is dec by acids, heat & electricity.  
Hydr & oxy count on in heat when form of oxygen  
for up state the wt in count in water.  
A cert quantity of Water is spent to atmo - air  
penet without it. In Rains the air is said  
to have an increased capacity for moisture  
by passing it over fire or flowers &c - Air also  
will dissolve moisture even in cold water.  
Clotter dried air thawing - As Hydrogen  
& oxygen low to gaseous form they will give  
out much caloric & in this <sup>modified</sup> state heat  
much greater than carbon as the carb acid gas  
formed requires caloric if it is so diff to con-  
fine Hydr & oxy gas, will go the whole wt  
of oxy in atmo air or in penetrate -

D. James Friday Dec. 17<sup>th</sup> 1849 3/4 of 6.

Signs of Pregnancy - important to be known -

3. Situation - When young & recently married  
when illegitimate, & ~~the~~ cap & menses -  
Not easy to tell immediately after conception -



Many signs may arise exclusion of pregnancy - Utterly hopeless great irritability & many pathological symptoms - The greatest is the breast & the uterus is enlarged & throbbing pains - nausea -

Stomach generally protracted - Stomach is disordered - nausea vomiting, cardialgia & indigestion - the sick & morning after rising - When it goes off festus dies - Depressed appetite - Looking for parties when articles, hence lounging - Not confined to stool - But extended - Menstrual - Disordered & constipation - System generally is not affected - emaciation, & feeble symptoms, irritability & mind -

Brain heart & lungs are secondarily affected for the stomach - but convulsions, palsy &c -

Nerves also obstructed - Some women have peculiar affections of the best signs - some toothache others salivation, after all very uncertain before the month -

Diseases of Pregnancy - Div into early & advanced pregnancy - or before & after quickening happens & end ~ 16<sup>th</sup> week - some sensible of it others not, but fainting & hysteria - if sick previously, feel her better - Sometimes so slow

160 or other fact - it is felt in transition -  
in early months the Dis. dep. upon Irrita-  
tion excites & utters - Irritability - Stomach -  
when great extent of Spec. then Rheu to open  
the Bowels - The Pulv Colomb. 15 or 20, ~~tar die~~  
Bowels are to be kept open - where sickness continues  
common Saline draught - Acidity is owing to  
the morbid accum. of Phosph acid - D.S. uses pure  
ammonia in every case of acid -

Call: Magnesi

Aqua Magnesi

Spt. Compositum

Alg: Murr. P. 31

Two or three spoonfuls  
to be taken either  
occasionally, or when  
the symptoms  
are continued  
after every meal.

When vomiting is incessant & proof of strength -  
Leeches very useful & put a stop to food.  
Constipation a usual attendant - Lencemur -  
Quercia - & break down feces - Laxatives: St. Pissin  
Sulf-Mag: - To give Roasted apples, Steamed Prunes  
Fruits in morning fasting - Case - Hey - husbandry  
relieved by cathart - & aper



Dr. Gibson Monday Dec<sup>r</sup> 20<sup>th</sup> 1819.

181

Gonorrhoea is apt to attack the <sup>stump</sup> ~~stump~~ after amputation -

Syphilis - Some doubt whether gonorrhoea is a syphilitic disease -

Gonorrhoea. Acute, suppurative, discharges.

Dr. Smead's term Gonorrhoea - improper.

History - It begins with itching & red & swelling  
with red & swelling - glans & next matter disch.  
pain is very severe in passing urine - In the  
commence of glans, see large red & shining & slight  
excor & glans, penis is swollen, the urethra in-  
creased in size - & tumours throughout the urethra -  
they are the remains of glands infl & not inflammation  
Charcote, is a spasmodic affec arising fr irritation  
but from & short, but owing to weak lymph  
or capillary spangiosome - In former the remains  
bec changed & is pus, part becomes thick or yellow  
& sometimes greenish - Matter is only formed from an  
exit to 1/2 in fr the end & urethra - disease & is extend  
throughout, & abscess dis & is extend only arising  
from hyperaemia. Remedy.

162 How commenced -

Symptoms cont - inguinal glands become infl.  
& lymphatic glands & dorsum penis infl. Testes  
are liable to be affected. but not at the com-  
mencement & dis -

Bladder is liable to be aff, wh. Hæm. Hæmor.  
diffic in voiding urine comes away by drops -

Inclination for stool & hemorrhoids - all these  
symptoms arise from sympathy - Swelled glands.  
& no urine from absorption - There is no alter-  
ation of the urethra - Proven by Bell -

& origin & Nature of gonorrh - 2 doctrines -  
1<sup>st</sup> allud. to Lues venerea - 2<sup>nd</sup> specif distinct -  
Hunter add the first. Says as to commence  
in South sea Islanders - from gonorrh - as charac-  
c<sup>r</sup> not contin so long, since destroying the penis.

Wallace & Benjamin's Voyages - In opposition Dr  
J. states that the matter is frequently a long time  
in the system before ulceration -

2<sup>nd</sup> Case of Hunter is a gentleman who had syphilis  
ulcers in throat & thine after gonorrhoea -

But no man has had commin or others after  
& the ulcers in mouth been venereal -



3<sup>d</sup> Case of Hunter inoculation, applied matter  
 of gonorrhoea to the prepuce. & ulcer was produced  
 with buboes, ulcers & testicles & w<sup>ch</sup> finally cured  
 by mercury. If this is entirely correct it w<sup>d</sup>  
 establish the doctrine. B<sup>t</sup> Hunter cannot be certain  
 other arguments against it are that matter ap-  
 plied & plans will not produce chancre. <sup>of gonorr</sup>  
 & Chancre will not produce gonorrhoea, when  
 applied to the urethra. When both diseases exist  
 no cure for 2 infections having been common.  
 Why does gonorrhoea get well & chancre worse -  
 Hunters advocates say the absorption of matter  
 is not produced in gonorrhoea because no ul-  
 ceration - But again not good - as the ulceration  
 alwys take place.

I again is the gonorrhoea can be cured by external  
 remedies & chancre not.

4<sup>th</sup> Gonorrhoea has existed long before syphilis  
 mentioned in scriptures, while syphilis was  
 not known till the siege of Naples.

5<sup>th</sup> w<sup>d</sup> require the same treatment, wh is in the case -  
 The diseases therefore are specif different.

164 It is uncertain at what period the gonorrhea  
after the application ceases - per bet 6 & 12 days.  
Inflammation state may take place or ceased time  
before menses is established. The course of  
this urine for free of constant <sup>or</sup> the existence  
of another action - After some time symp-  
toms subside - & remaining still continues -  
called pleet - some suppose this not infec-  
tious - B. D. S. considers it Chronic gonorrhea &  
tho' not so apt to infect, still possesses the power.  
In Women not so painful - & can be confounded  
with Blenorrhoea - Difficult to determine whether  
gonorrhea in women exists.

Treatment - many remedies - Most only re-  
sult as one of decided adv. - Per- Orem co-  
n. from of much service, only as the disease  
is extended & system - Thus the local affection  
produces few de. & de. Per rem. - vs, Purg  
Drift = In also every visit not ab. vs, Purg  
times & in some cases more useful than vs.  
When constipation sympt or menses - Diluents  
serviceable - also Dietetics -



168

Best remedies are local - Emollient poultice  
best w<sup>th</sup> much inflam<sup>n</sup> - covering th<sup>e</sup> glans penis  
& scrot - aft<sup>r</sup> infl<sup>n</sup> is subd<sup>d</sup> - injections - th<sup>e</sup>  
be mild if any - Oil, Milk & Water &c -  
aft<sup>r</sup> - strong inject not used - Oak bark.  
P. Bark, vitriols & mercury, alum -  
White vitriol best - 3 a 5 gr & a Rect<sup>d</sup> & Phurb.  
with Zingib<sup>r</sup> root & Agave - not used fr<sup>e</sup> 6 or 8 times  
a day - Bad eff<sup>s</sup> are Vesical tumor - on  
a strength & injection - They also produce striae  
tines in th<sup>e</sup> Urethra - Dr J. uses the viscous R<sup>e</sup> of  
opium diluted with 2 parts of water & gradually  
increased - Linnæ's Caustic - mixed with sweet  
oil as a bougie & passed into the Urethra -  
Dr P. uses th<sup>e</sup> diluted Nitrous acid - applied to  
the very extremity of the Urethra - ʒss - ʒj of Water  
Dr Choiseux uses flu<sup>r</sup> & local vs, opium & camph<sup>r</sup>  
phos, Poultices & foment, Steam, leeches -  
aft<sup>r</sup> inflam<sup>n</sup> is removed the suppurable lymph  
Mercuri dulcis, Cicuta, elect<sup>a</sup>.  
When Bladder is affected - Vesica a Penis  
& opium vs &c -

In German Humor - vs. Poulaines, Boudier  
 of the Kinetics, I some recom. bougies  
 to bring on the discharge. Sh<sup>d</sup> be cautiously  
 used. When swelling contains free mercury  
 & electricity

Flect. - Many rem. - skin kinetics Bils  
 Copait: not used for a early stages.  
 Local remedies - hypodermic or med. Bougies.  
 per m? Corros subcl for a Zep water.  
 Bougies better kept in 10 or 15 minims.  
 Read Hunter - for altho wrong in theory  
 Best in practice & an infer is to be der  
 ived from it - the work of B. Bell tho in  
 its common use in this country is but  
 a trivial production & not worth notice

D. Hare Monday 20<sup>th</sup> Dec 1849.

Water in some alkalies, as Potash & Barytes  
 hydrates resist the action of red heat &  
 can only be separated by chemical affinity.  
 Some salts contain no water of crystalliz<sup>n</sup>  
 Water must, if any, be considered as the acid  
 of giv<sup>g</sup> principle. Best. Proof of the compo



sition of water is the galvanic apparatus. as we are able to obtain both at the same time. Electro caloric is a great suggestion in nature it makes & resembles many things. is the most powerful agent of Chemistry & will probably explain many a Phen of Nature & the properties of Water has also been decomposed by mechanical electricity or that generated by the machines, but in very small quantities. When potash is off a galvanic apparatus Potassium & oxygen are formed this effect also takes place when heated in a funnel. The Potassium possesses all the properties of metals except their weight. The test of alkalis is the Brazillates decoction. forms a brown precipitate. Eff. - Potassium with the Decoction or water produces a beautiful rose colored flame. the water is decomposed the Hydrogen is inflamed.

Review - of the experiments - Formation of water overturned the Doctrine of Phlogiston - Lavoisiers theory is far true tho' remains in some points left probably a combustible. The supposition the Hydrogen was a component

part of metals again reviewed the principle of  
 Phlogiston for the experiments. To prove it  
 completely overthrown it. All volatile substan-  
 ces are inflammable principles - & if charred.  
 & by conversion into vapour it m<sup>d</sup> be an  
 inflamm principle itself & not contain an  
 inflamm. Combustion is the chemical action  
 which produces light & heat. The fire of volca-  
 noes is diff fr it & surface, for we can  
 sup fr it is a sufficient quantity of oxy-  
 gen to supply to heat a fire - Prussic acid  
 we found to contain no oxygen - & Sulphur-  
 retted hydrogen support combustion -  
 Rationale of obt oxygen - at a high temp it  
 heat overcomes its attractive power betw  
 metals & oxygen & they give it off.  
 What Scheele supposed an ~~absorption~~ evolution  
 of Phlogiston. Lavoisier proved to be an  
 absorption of oxygen. Of Respiration - Does  
 not think the <sup>real</sup> capacity of arterial blood is  
 so near to its explanation as we suppose  
 it done by some large system.



169  
I Despair is founded as well on vital as  
chemical action - & full health is necessary in  
making experiments - The respice of Plants  
is immense that of Animals - oxygen is given  
out -

D. James - Monday Dec<sup>r</sup> 20<sup>th</sup> 1849 -

Hemorrhoids. Laxatives - Warm but not good  
Best bet after Local sepl by leeches or cold solu-  
tions of lead &c - Best ointments are those containing  
acetate of lead - Spt oil of Turpentine in doses  
of 20 or 30 gtt ter die - recom by Dr. Keen -  
Drainage - 1<sup>st</sup> Emetic, then rhubarb, & opium -  
Strangury - causes Sympathy between the neck &  
bladder & uterus - Case - Also from pressure on  
the neck & bladder, produces infl & neck & bladder  
When fr press not rem bef belie -

Attent vs, purgatives, demulcents flaxseed  
Barley water, & only medicines I rank copiously  
or small doses of laudanum -

Suppression of Urine - either total or partial -  
~~sometimes~~ ~~causing~~ no danger if properly treated -  
goes off when uterus enlarges - change of posture

170  
recumbent posture, Steam of warm water -  
& bladders you relieve it, if not use the catheter,  
Introduction - Lay a back, on the right side turned  
- introd 4 hand under the right thigh, the rectum  
will be found just under the arch of pubis - When  
no catheter a common quill will suffice.  
When the uterus is retroverted or depress the catheter  
behind the symphysis pubis - Vide Bell - some-  
times causes retroverted uterus -

Retroversion of the Uterus - rarely occurs  
in a state of nature. owing to extreme refine-  
ment of manners - Dr Hunter first described it in  
England - in France by Jorgione 1746 - before  
Hunter - More liable to take place in 2 cases,  
where great concavity of pelvis, or deformity  
Before the 3<sup>d</sup> of too space & after the 4<sup>th</sup> rise, front of the pelvis  
occurs before the 3 & 4 month - Ref<sup>ing</sup> to Dr Hunter -  
Dr Denon first described the true cause -  
viz Suppression of urine - so th it is the cause  
& not the consequence - It is also the predispose cause  
& occasional cause sometimes - External violence  
can seldom cause Supp of Urine - until  
after the 4<sup>th</sup> month - Seldom happens in France.



1791  
owing to (want of delivery) - In examination can  
feel the fundus & cavity & pelvis - Nature  
unscripted would never cure the disease as Hadde-  
n's rupture <sup>treating</sup> - Draw off the urine - & depress the  
catheter in passing it - the flexible small catheter  
is recommended by Dr. DeCuman - after this give an  
enema to procure stools - must use the catheter  
2 or 3 times a day - When about to assist its re-  
turn - place the patient on her knees & endeavor  
to raise the fundus, or not use much  
force - the pass 2 fingers rectum - if not success  
Use Delig. Urine - Then intro pessary, &  
recumbent posture - Case Dr. Senter, paracauteris  
vesicae - & successful - Dr. Hunter thinks the uterus  
in 6 punctured - Case puncture & uterus & porter  
part & vagina, successful - but dreadful symp-  
toms w<sup>th</sup> the course - Sabatier punctured the bladder  
above the pubis - 2 new methods: in France  
Gardien advises Synchoukoria - & Capman  
advises pushing it to one side & pelvis & push it  
up - may be tried - Dr. Collins, Goures - recom-  
mends cold vinegar & water after reduction -

172  
Disproportion may take place at other times  
bes frequency, owing to suppression of menses.  
After birth & a cessat. & menses. The usually  
occurs at 2<sup>nd</sup> or 3<sup>rd</sup> day tho has occ<sup>r</sup> 9<sup>th</sup> day -

Case by White - rel by cop. cose of face, mouth  
& & pained by enlarged ovarium - D.

D. Gibson. Tuesday Dec<sup>r</sup> 21<sup>st</sup> 1849.

of Lues Venerea - or Syphilis. Need not  
enter into its origin - 1<sup>st</sup> treat of the most com<sup>pl</sup>  
in Chancere - most liable & places, in & prepu-  
frenum & coronal glands, also lips, eyelids,  
te - from matter lodging & sometimes seldom  
occupies prominence - In Women labia & vulva  
all puerium & vagina - see in extensive  
& numerous in women - Microscops have contri-  
buted the disease - & surpous te - When a pustule  
or bad & pen - & purple the scab & if rub-  
bed off ulcer is efford - for lip pain &  
infl & wh & prepuce - It itching & pangs, pur-  
ple - lip infl & pain & pangs when prepuce - &  
in in every direct - The bone is hard thickens  
& elev & edges elev - The thickens is an exalt



best diagnostic - & when hardness remains  
danger of breaking out again - Edges jagged  
& hard & thin viscid matter - Not hemorrhagic  
earlier when deep - ~~See~~ appears at differ times  
sooner & freer - not so soon as gonorrhea  
in general better 8<sup>th</sup> & 15<sup>th</sup> Day - As long as it is  
in off the system not to be considered as local -  
In Bubo - more to be seen every swollen gland  
not to be called a Bubo, but as bubo not seen  
as an issue for diff causes no wound - Ven Bubo  
is it off & absorbed & ven vice - may arise since  
the existence of any local complaint -  
a<sup>2</sup> from wounds - 23<sup>rd</sup> for Ulcer - Absorbs  
one life free off the glands - Symplicates some  
times suppurate - & small abscesses - There is fre-  
quently some inflame before suppuration -  
In Men & groin - & nearest the chancere -  
In Women glands & lab & around lip -  
Hunter supposed the ven glands - or in ven -  
but he after found that the matter of Bubo is  
infectious - Hunter says but one gland per-  
sistently diseased - R<sup>o</sup> D<sup>r</sup> G. thinks not for the case

174 Several glands usually affected. Buboes  
for commences with throbbing. Swelling  
ment, no ad swelling is uniform & then  
becomes diffused - Not so moveable - It  
is retained for some times - But for matter  
forms rapidly - Skin at 1: bright red & then  
purple - pain great & ulcer but has extens.  
surface for yellow - When ulcerated there is  
but little diff betw it & chancre - B of  
Ulcer is to conf w Scrophul - B latter  
least painful, & slower; ash colour.  
Do not prove for color - & then not so acute  
& seldom suppurate - It matters slow -  
but for Ulcers a less in wound a fast one - Diff  
cult to discriminate for ven: B. - No to conf  
w Hernia & Anemur -

Of Secondary or Constitutional Sympthoma -  
owing to absorption of matter into the system -  
No for causes for chancres - but also for ulcers  
in any part of body - When taken in eff  
or soon perceived - Some parts are liable to  
it - skin throat, tonsils, nostrils - When



175  
fascia periorbit. & bones - Periorb. att. at 1<sup>st</sup> to  
being in eff. to cold. The secondary ulcers  
not contagious - 1<sup>st</sup> of Secondary Ven. Ulcer  
in the face on diff. parts - in readily on mucous  
membranes, round ragged & irregular, in  
heal at one place & trace a smooth - in freq. off  
the throat - sets any previous inflammation  
& ulcer to rest - ragged & raw in the case of cold  
matter & travels faster. sets painful & loss  
of substance, has white matter seen though  
it can be washed away & new scales -  
in the case of cold Ulcers - Cyano Tonsil -  
but it is often very painful - also in the case of  
in indolent, thinning & tonsils, when lymph  
can be removed not venereal - D. Adams - says  
Ven. Uls. give rise to pain, tho in alv. - It does  
decide hostility - Per. per. observes its progress  
best to delay a little = Tonsils, soft palate  
& Uvula in freq.

Next Ven. Erupt. in the face or feet - begins  
in small discol. spots, then mottled - sometimes  
purplish - scale or scurf forms & after

176 This ulcer forms - Part dill. <sup>roots &</sup> nails &  
affected, nails drop off & Ulcer left - Hair  
is destroyed - Run off a Lead, Pericost & Bone  
are worn in their course & all parts that  
are so soon affected - 11<sup>th</sup> Swelling - Cylind  
Bones partly the Rad & Ulna - you con-  
sider size but noticed - called a Node -  
then swelling on the dist p. Rhew by not  
attacking the joints - pain in bones & thro,  
out the system - flat bones also run to disem-  
Turner found on the skull - & bones not best  
& some more exposed - on front of jaw disem-  
Syphilitic bones are generally heavier -

If Warts & Excrescences - you see  
narrow neck, broad & expanded on surface -  
& res mushroom - fissi condylom & regner  
but form - hide -

There is gen. fever in Syph & in adv stages  
Boutie - night sweats - & blunche but are off  
& then fatal -

Treatment - 1 Chance - as at its com-  
mencement it is local, the 2<sup>d</sup> & 3<sup>d</sup> if this



clasp - but wish to trust entirely to local  
remedies. For Loc rem - one such as best  
it specifies out a sore - Escha - with sup-  
puration & Quacklin & continue for  
several minutes - But one, at the same adv -  
Only specific is Mercury - run to the along  
or loc aff - for if Cal has die - or Merc  
oint & inside a it or grow - It? be contin  
until healthy aspect or are healed - slight relief  
for suff - run dress it & or more ointment  
or calomel - When indol Precept Rubr -  
Blase wit, & others - For Mer Hyora  
useful as much - Quacklin Extra Acute &  
Scabbing - Phlegm & Paraphlegm -  
If Buboes - It? 1<sup>st</sup> being on resolution -  
Mercury - As purg - for & emetics de -  
men & only to def on - Must 1<sup>st</sup> pass thro  
the dis gland - When a pr - ruba thick - It? not  
out the bubo - 3ij or 3j once a day suffic -  
not less or more, need - but there is a  
resolue & rem schickus - from abroad -  
Poultices - de When this thin is to open

178 When I meet you best - When I see  
Lugs & caustic - D. Parrot's next after  
by Liban -

D. Hare Sunday -

Alkalies are those subst. wh. have alkaline  
properties - Henry says changes veg. blues  
to green but this is not the case, with litmus.  
it does not change its blue colour - Litmus  
is a good test as it is kept col'd. indirectly,  
it tests alkalies as it will restore the colour  
of litmus reddened by acids. Turmeric is a bet-  
ter test for the alkalies, first dissolve it in alcohol  
& then in water - forms a yellow solution - reddened  
by alkalies & restored by acids - Basilleto is  
another test of alkalies & furnishes a better  
test than turmeric as it is more dissolved in  
the water - Alkalies combine & animal subst.  
& especially oily & madder - Very soluble in  
water - & heat can not drive it off - Render oils  
miscible in water - & form soap.

Potash - obt. fr. lignis wood ashes - This is boiled  
down & when deep of as much water as for



179  
drives off becomes potash - When in this state  
is coloured & is converted into pearl ash, by  
exposing it to heat & again roasted - is not fine  
potash but a subcarbonate of potash - Pure  
potash is made by boiling shelled lime in a  
strong solution of pearl ash in an iron vessel  
by excluding the air & suffering the vapour to  
escape - then let it subside & in a few hours -  
clear solution of potash is above - this run  
drawn off by a siphon - then boil it down  
to the consistency of honey, add alcohol &  
boil to distill it to in a silver retort -

Rationale - Lime takes the carbonic acid from  
the potash - but lime will not take off all  
the carb acid & in pure alcohol will only  
dissolve pure potash - The affinity for water is  
so great the potash decomposes the alcohol  
& the carbon is liberated - & in this way water is  
decomposed - Potash will not crystallize  
with alcohol alone, but water is necessary -  
When pure potash is left in air remains ob-  
scurely moistens & also attracts fixed air -

When potash is in Crystals it will not absorb  
fixed air, but does when in solution.

When dissolved in the state of Hydrate, potash  
produces heat & when crystals are dissolved  
cold is produced.

Soda - obtained fr. Bailler & dea salt.  
very analogous to potash - Its combinations  
are less energetic, its affinities less powerful  
its affinity for water less when pure - but  
the salts of soda are more deliquescent than  
~~those~~ those of potash. - These are called fixed.  
They precipitate earths - Eff. Murate of lime  
precip. by potash - Eff. Nitrate of Mercury  
precip. by Carb. of Potash - Eff. Copper pre-  
cip. by Sulph. Acid by potash.

D. Gibson Thursday Dec 23<sup>d</sup>.

of Organic diseases - v. f. Fractures - disinfected  
Gen. Lematti - Dis. Crani - &c - complicated.

Fractures - Nose -

Fractures - Jaw -

Fractures - Loos. jaw -

Fractures - Vertebrae -



Dr Hare Thursday Dec 23<sup>d</sup> 1859.

181

Tartaric acid renders potash more insoluble & soda more so - By adding tartaric acid being added to an alcoholic solution of Potash a fine precipitate ensues & when a weak soln of soda the salt rem dissolved a liquid - This is a test - Another test is adding a solution of Nitro-muriatic of platinum to solutions of salt of Potash & salt of soda - Potash precip - Soda not.

Potassium comb in oxygen in 3 proport.

1<sup>st</sup> 2 atoms of Potash to one of oxygen - when absorbed in air  
2<sup>nd</sup> 2 atoms of oxygen to one of potash - obt by ~~combust~~ in atm. air.

3<sup>rd</sup> one atom of oxy to one of Potash - forming Potash & m<sup>ly</sup> by decomp of water.

Wollaston's Scale of Chem Expt.

In preparing Potassium - no protect the gas barrel from oxidation by a very inferior tube.

Potassium is a useful reagent of analysis - will act on almost every sub<sup>st</sup> containing oxygen, except at very high temperature - When alone - decomp Potash, L<sup>th</sup> - Arsenic Potassium, & Mercury & adding to it

minute of Ammon

D. Schiöen -

Fractures - Clavicle - in freq - 1° & 2° & 3° - muscles attached -

Caused - direct blow in Contre coup - Fract. in 1/2  
 a middle or at or near to Thorac extrem - in freq  
 a Contre coup - In 1/2 trans or oblique - Wh comm  
 not in freq - caused by direct violence - See Humer  
 al extrem - & then by S. Plot or Heavy weight - Also  
 Displacement a Stern ext. - When oblique but often  
 important vessels - First compound, project & skin.  
 Shoulder also falls - Deranges you can see Hum.  
 end frag - forced downwards - Pect & Delt Muscles.  
 Thoracic ext in gen displaced - Distinction Marks -  
 is a diffic. - a 1° ascent gen or fine - But not with  
 the marks - When Shoulder sunk, I cannot see to an  
 Can raise his arm or his head in many cases.  
 Other signs - Gen 1° a peculiar attitude - Desault - Not like  
 the case - One tumor or neck for Polypus - It is also in  
 a lumpy series - Various Machines - Older surgeons  
 supposed the sternal frag elevated & displ. & it  
 endeavor to displ it - but unbray disc to resist



Then endeavor to raise the humeral end - By raising  
the arm - 1<sup>st</sup> Method by Bandages or rollers - After let the  
ball remain in the axilla - figure 8 for used still - Heister  
suggested something in necessity - Crucial piece of iron  
as. To with straps at 1, 2, 3. The next machine or that by  
Brador - Corset - all intended to retract & fix the  
shoulders - Must retract the shoulders - gives pain  
infl. - By forcing back the scapula too far it forms  
a fulcrum & forces out the humeral end - objection  
a fig 8 is that excoriation & pain are produced - can not  
retain the shoulders fixed - See Desault 1<sup>st</sup> avoids the  
difficulties - 3<sup>rd</sup> 1<sup>st</sup> over the Should - 2<sup>nd</sup> outwards 3<sup>rd</sup> Back  
1<sup>st</sup> Pad a bumpit to which - 2<sup>nd</sup> 3. Rollers - 3<sup>rd</sup> Comp  
24 Large p of skin & 5 Bands - Desault inferi super -  
Bay's app. - Pad. & girdle or buckles - 3<sup>rd</sup> Braces -  
or straps - Great objection is that it is to the Back

De Hare - Friday Dec: 26: 1819 -

## Volatile alkali: or

(A new alkali discovered & detected by A. P. Berzelius - called Lithina - consists of a metallic base united to oxygen - as other alkalis.)  
 Ammonia - important on accounts & found where  
 & Nearer in f. Proc & decomp of Amine  
 matter - Nitrogen exists in f. quantity in Amine  
 matter - hence it diff & decomp of Amine  
 Nitrogen & Hydrogen unitary & form Hydrogen - prefer  
 unitary & nascent state & form H gas -  
 Has the mechan prop of other air - proc & then  
 of Ammonia - fer or H form a resin in vol  
 matter. When ammonia diff to be found out  
 to elasticity & spanginess - consists of Muricatic  
 Acid & Ammonia - can be obt fr it by any sub  
 it is a strong off & acid, there & the fixed  
 Alkalies & Alkaline earths - Lime is now used  
 employed to obtain it - Except a small corpus in  
 against acid solute - Mix Muricatic of Ammonia when  
 exposed to heat & raised over Mercury - It parts  
 infl in other air, but inflame in oxygen



gas - Detonates feebly & Electric spark & also -  
Pulverine spark - Melts ice as speedily as fire -  
water combines w it w p rapidity - <sup>or by its union with</sup> Exp. impreg  
of water w ammon gas - takes it up w a rap  
or w a apply it - Can b also obtained by Distilling  
nitrous water from a mixture of Muriatic &  
Lime lime. By Am. Pum is obtain - Quantity is  
infl by atm press - The comb - Nit & Hydr  
very feeb - & can b exp - elect & pale -  
Can b condensed at 40° below zero - 3 Hydr 2 of  
Nit - By weight 5 of Nitrog & 1 of Hydr - Atom  
of Nit 7.5/10 - & Hydr. 5. Under Henry -  
Also prod by exp atm air to iron filings & water  
hydrogen is found comb - nascent state & forms Amm  
Laffond to have a Metallic Base - Berzelius thinks  
there can b oxygen in Nitrog - or it w? not combine  
with acids so readily - Another proof - Metal B -  
in its amalgam with Mercury - & if not metal  
D. Davy thinks metal the primary form of matter  
& that oxygen, Nitrog & Hydrogen, have metallic  
bases - Potassium for its softness can b called a metal  
but for its brilliancy, fusibil, melting &c is metal

Oxygen is now an except a formet  
 of alkalies, then Hydrog. a form of Sulph. &  
 Chlorine - <sup>Hydrog.</sup> Nitrogen is the only subst. w<sup>h</sup> can't  
 w<sup>th</sup> <sup>Nitrogen</sup> ~~Hydrog.~~ <sup>acid</sup> acidity - & with oxygen <sup>acid</sup> acidity -

D. Pison Monday Dec. 27<sup>th</sup> 1819 -

Fracture - Scapula - not easily fractured -

Fracture - Rib - Sternum - Humerus -

D. Hare Monday Dec. 29 1819 12 O'Clock

D. Hare thinks in this case Hydrogen is the prin-  
 ciple of alkalinity - viz Ammonia - Effect of Potass-  
 um - of ammonia; forms Azoturet of Potassium.  
 Thevand. Pulvis Sublimialis - Nitro Sulphur &  
 subcarbonate of Potash - All alkalies fuse in  
 our acc<sup>ts</sup> & affn for Water - Sub-carbonate of Am-  
 monia - Carbonate of Lime is now mixed & new  
 of ammonia & exposed to heat - Two pairs form later.  
 Difference between sublimation & distillation -

Earths - <sup>some of</sup> these resemble the alkalies very much  
 & are therefore called the alkaline earths - vide  
 Henry for it's definition - All earths are Bary-  
 tes, Strontites, Lime & Magnesia & proper -



also mention - Differ fr Alkalies - in their 187  
imperfect solubility, not their infusibility.  
Have just found them - Strontites & Barytes  
more soluble th lime - forms Strontitic &  
Barytic water - & - pellucid is formed on these so-  
lutions also th of Lime owing to Comb w Carbon  
ic Acid - this eff & in take pl w magnesia -  
Were supposed to be metallic oxides - & in th.  
Says obtained in charcoal, similar to that of am-  
monia, from the earths -

Barytes is obtained pure or by dissolving the  
Native carbonate in Nitric Acid - or by  
heating charcoal with the Sulph. of Barytes  
a Sulphuret is formed wh is decomp by Nitro-  
acid - Evap th Nitric solution to the consistency  
of honey & drive the Nitric acid off in a Pla-  
tine Crucible - Cons only be obtained by Nitro-  
acid - <sup>Some water in the Residue & Barytes is dissolved</sup>  
Acid - Actionable - Properties - Takes Sulph Acid  
fr all its Combinations - Exp Sulph Soda decomp  
by Barytes - turbid - this is th only earth from  
which th effect takes place - With Strontites it  
will not become turbid or D Metalell killing  
Takes

Dr. Hare - Tuesday - Dec. 28<sup>th</sup> 1819.

Salts of Strontites things alkaline & red  
 flame - when burning. E.g. Baritic water  
 Turns Brown the salt of Benzil wood & red  
 the yellow tannic similar to the alkalis.  
 Strontitic water - same effect. Lime water  
 similar effect. - Barites plates when mixed in  
 water & affords a milky solution - same eff.  
 with Strontites. Lime used as cement & impor-  
 tant to be noticed - its history very interesting  
 it was the foundation of Pneumatic Chem.  
 The carbonate & for water are driven off for  
 Limestone by heat. It is understood that it  
 gives or fixes a lime - but this is owing to the  
 water becoming fixed & becoming a hydrate.  
 Lime in cement absorbs the Carb. Acid from the  
 air & reproducing the stone from which it  
 is made. Old buildings harder and thus acc.  
 To procure pure Lime, is to take the carbonic  
 carbonate or <sup>usually</sup> Oyster shells - when exposed  
 to heat the carbon is given out. The heat given  
 out by flaking is also equal to a low red  
 heat. Neither Lime Barites & Strontites



act as the alkalies - The strontites res<sup>189</sup>  
differ from Lime it resembles it in not  
taking up another dose of oxygen when heated  
or oxygen gas - Barytes takes up 2 portions  
prot & deute oxide -

Magnesia - usually obt<sup>d</sup> fr Epsom salt.  
Which bears a small water of sea salt - can be  
obt<sup>d</sup> fr it & add a fixed alkalies - Not soluble  
in alkalies - more infus<sup>to</sup> - rather a soft earth.  
Soapstones owe their properties & pres of Mag-  
nesia not easily - It combined w Lime  
Magnesia in Lime is injurious to vegetation  
Lime for oyster shells in the best - Eps salt  
Lime of Magnesia precip by solution of pearlash  
this is the alkalies alba & shop - The rem-  
nant acid can be driven off by heat - & th<sup>3</sup> be  
driven off for medicinal use - Calced Magn-  
esia Dr Hare thinks owes its acidity to pot-  
ash - Retrospect - we recoll<sup>d</sup> to B S L & M  
res<sup>all</sup> in flame, heat in water & eff a very sol  
diff in being in insolub, infus<sup>to</sup> & p<sup>er</sup> spec<sup>ies</sup>  
Magnesia differ in lightest & least alkaline.  
Barytes differ in heavier & in solub in acid

190 water - But Strontites takes Diploides in  
better in hot water - in cold water - Not 118  
Strontites & not form deuteryde & or  
Str & Bay decompose all sulphates by  
simple affinity.

Silex - is abundant to any other principle  
found nearly pure or rock Crystal - There  
is few pure rock crystal. To get it pure -  
take native crystal regular, & even com-  
pure flint, pulverize & mix w/ caustic  
potash or soda & rub in intense white  
heat & crucible. The Alkali 2 - Earth 1  
part. If reversed the proportions & use  
2 parts of Silex & one of Potash we obtain  
glass. When more Alkali obtain ligno-  
siliceous or lign of flints - The rev is the  
one <sup>as</sup> with Magnesia - the one is Diplo-  
ides & earth, the other is alkali - Exp Precip  
acid & solid formed - Exp - solid flint  
becoming solid by pouring Sulph. acid -  
~~series~~ series of lines - 2 1' experiments  
the Silex remains nearly pure while the  
acid combines w/ the alkali - A trace



portion, & of Sulph. Acid same as it <sup>1791</sup>  
It is diff to separate.

It also to be obtained fr fluents of lime.

Pure Chrysolite m. to be formed in nature by  
the boiling point of water being raised &  
deposited the sulph. at nearly a red heat /  
Sulph. combines with the alkalis & alkaline  
earths. It is inferred to be metallic it is prone  
to be a subst. comb. w. oxygen. - Thinks,  
h, its base not metallic & a to be assoc.  
w. carbon & boron. & not substance -  
which form acids with oxygen.

D. Gibson 11. 1819. - a. Macton, & Macton  
radium, which, unperf. met. compounds & fuses.

D. Gibson Thursday - Macton - Thistle.

D. Hare Thursday Dec. 30. 1819.

Sulph. of Magnesia is soluble. - other sulph. not.  
In Soils - no great solubility not good too easily  
washed away - But others, wh. slowly att. more  
better - Lime is found in veget. by Sulph.  
rarely & diff. to tell how formed - Elements  
of Sulph. Lime Calcium oxygen & Sulph.  
of H<sub>2</sub>O. - Sulph. principle & characteristic impred.

192 breakers when exposed to very low  
temperatures - depend upon bad con-  
ducting power - differ structurally expanded.  
& cracks off separating bottles & tubes by them.  
Prisme Aspects drop. When broken - red to flow.  
depends upon under contact & after lamin.

Alumina - but a alum of common  
Alum is a triple salt - Sulph acid Pot & Clay.  
obtained by adding carbonate of potash & alum  
May be comp'd & from salt - but taste is  
different & can also be distilled by add carb of  
Ammonia & precipitate alumina & not  
Magnesia - Alumina forms plastic sub-  
stance w/ water & communicates it to its earth.  
Resists silice in having an attraction for  
the alkalis & alk earths - & has a strong  
attraction for col matter - used as mordant.  
Furnishes utensils, Bricks, vessels, &c. - Pure  
alumina is united to them for power as  
it combines w/ so much water & it  
cracks when exposed to heat - To remedy  
this it is blended with silice - with which  
it does not mix in water. In black houses



193  
alumina is used in two different  
states - 1<sup>st</sup> Crucibles for glass houses - Porcelain  
diff fr common pottery by having 2 addit  
subst - is semitransparent - By exposing  
glass to a subst wh detrs it alkali it is con-  
verted into a state analogous to porcelain.  
Lites or suff to camp precious stones -  
B since found the Alumina exists in nearly  
all except it Diam and it also the hardest bod  
Glucina - aqua, Manina, Beryl. rather an  
object of curiosity - It is -  
Ostria - Thorina - Lircon rest -

Acids. other subst besides oxyg poor  
and - Water is open to acidity - not itself  
but fr its elements - Selenic acid is derived  
fr Beniga - Tho some acids hve it property  
of ionneff. Proferine, fer. redder litine  
& uff Bl. some hve it redder it - Diffic  
to find any pec characteristic - Dr. Hare  
thinks acidity depends upon salve & it  
a pec st of salve produces acid - Old liquor  
pungent out of a pewter cup - Acids cont  
different proportions & acidifying principles

194 I furnished acids in both cases  
I different being <sup>Sulphuric</sup> equal to den-  
diff deg of acidity - but when left -  
Ic - w<sup>th</sup> a greater property - & when run  
off w<sup>th</sup> enfl. Nitrogen came away -  
Nitrous, Nitric, Nitrites, Nitrates -

Carbon - when burnt in oxygen and  
produces - Carbonic Acid causes effervescence.  
when I run off a combination - Eff. Pr

D. Gibson Friday Decr 31<sup>st</sup> - on Structures of the  
Condyles - femoras - & Patella -

D. Hare Friday Decr 31<sup>st</sup> 1819 -

Diamond is pure carbon - & tho' diff fr Chem  
is ~~it~~ nearly the same in its chem properties.  
Water is found in it, but extraneous &  
not essential - Charcoal is excessively porous - &  
off a diamond - exists throughout the whole of  
structure furnishing the basis & solid fibres -  
acts in absorbing by capillary attraction - exp  
rises water & alcohol of its noxious or offensive  
properties - & is used to purify spirits - burnt or  
otherwise deteriorate - & w<sup>th</sup> to resins.  
due this discovery to Mr. Society of Peterborough.



2 modes of obtaining it - first add charcoal - still & next filter it & then distil. French filter. Mixed air or Carbonic Acid - can be obtained in other ways - by driving off carb. acid from lime by heat - Paul of Geneva - Why does not heat drive off Carbonic acid from carb. of Barytes - By adding flux which decomposes the carb. acid & produces some oxyd of Carbon - which is then driven off.

New Method of Obtaining carb. Acid.

Exp. string - candle - with carb. acid.



Instrument for transferring gases.

Air is much heavier than atmosphere air & is positively stultid or deleterious when land immersed in it - when cut - Causes Breach - When breathed when candle extinguished - Thinks no pain of charcoal deleterious from the poisonous oxyd of carbon & not carbonic acid gas. Carbonic oxyd - is generated of oxyg - can be obt. by burning charcoal in deficiency of oxyg - or by decomposing carbonates or charcoal or iron filings &c. - When mixed with lime in 2 parts - it is most energetic

196

82 - East so. - Thus Chase says upper

Dr. Hare Monday Jan 3<sup>d</sup> 1826.

Law - Water takes up its own bulk of  
 Carb Acid at every pressure. Whateven  
 quantity that air may be - here by comp  
 we have 100 or any other quantity of Carb  
 Acid - than it does by a Condenser -  
 reverse to the air pump. Expts Princip  
 of lime by Carbonic acid in water - Effect  
 is to render lime ~~is~~ insoluble in water  
 & then when <sup>more</sup> water is added or at Carb acid  
 is added the carbonate is dissolved - then  
 mix water - The Cheapest & best method  
 of obtaining carb acid is by fermentation  
 Our ferm of Alcohol is finer out -  
 When litmus is turned red by Carbonic  
 acid - will become blue by exposure to heat -  
 to some of Carb acid -

Carb acid is expelled by freezing as is ac bary  
 water - It not only comb & alkali & alkali  
 but also metallic oxides - White lead con-  
 tains a quantity of this gas - & Carbon



of Copper a beautiful green is also  
formed. - Pencilash is a sub-carbonate -  
containing  $\frac{1}{2}$  the gas of Carb Acid. also some  
Muriatic is sub-Carb. & a trace of Carb Acid.  
When saturated the volumes are equal -  
(Alkaline taste is not totally destroyed when  
given in) By these alkalies many correct  
the sourness of milk - & Bakers correct  
the leaven by potash &c -

Carbonous oxide -  $\frac{1}{2}$  quantity of oxygen.  
Chalk & iron filings mixed & left to heat -  
iron takes off  $\frac{1}{2}$  the oxygen, the remainder  
is carbonic oxide & having no affinity  
for lime paper cut over water & is not  
much absorbed by water. Analogous to hy-  
drogen by burning itself passing flames -  
burns in a light blue <sup>or bluish</sup> flame - These gases  
will not burn when the cone out of a test  
very fast, must come out slowly to and  
then to burn -  $\frac{1}{2}$  inch pipe of water is  
about the right measure to run it down  
two inches will be too much -

Carburetted Hydrogen. Carbon itself  
 is the fixed substance in nature can  
 be dissol'd in Chlor. vessels. & Hydrogen  
 least fixed & only escape for a few  
 all the rest what remains their properties to  
 Hydrogen. Hydrog is the link by which  
 Carbon is united to Caloric - & Decomp  
 of vegetable subst the gas is generated. The  
 flame of hydrogen is scarcely luminous  
 at day time & in the eve by adding  
 carbon. ~~Carbon~~ This gas is made by passing  
 Ether the hot iron tube - & also by  
 Sulph. Acid - 2. proportions Bi-carbon  
 the Hydrogen & Carbonat in the Hydrog.  
 Have attrib the lighting property to volatile  
 oil in solution - Eff.  $\frac{1}{3}$  Carnian Exp  
 cold within a few hours - part of carbon  
 remains while the carbon unite, or a  
 portion of hydrogen & form. This gas  
 not absorbed by water -  
 Eff. - Antif. Super Carb. Hydr - 3 pts.  
 water - 1 of sulph. acid & Lime & adding



oil of Turpentine. This Carb. Hydrogen <sup>199</sup>  
is also found in decaying - coal in mines  
or in the exhausted coal & coal mine it  
is formed - Geologists attribute it former-  
ly to coal - to decaying of veg matter -  
Volatile matter of wood or confine & after  
it matures to coal - Sir J. Hall under pres-  
sure made coal by subjecting the volatile  
matter of wood to heat under pressure -  
It has been described as life & miners - Sir H.  
Davy found that it gases or passed thro  
small orifices & pipes would not ex-  
plode & hence constructed <sup>safety lamp</sup> a new gauge  
round a cannon lamp - may even  
burn inside & heat the mines red in  
arranging without

D. Gibson Tuesday Decr Jan'y 4<sup>th</sup> 1820  
On Compound Fractures. 4 varieties

- 1<sup>st</sup> Simply fractured or to slight m<sup>d</sup>.
  - 2<sup>d</sup> Var - Where bone protruded to a consid  
extent - Some advise letting it remain in the  
situation.
  - 3<sup>d</sup> Variety is where the bone is crushed or com-  
minuted.
  - 4<sup>th</sup> Var is where it is attended w<sup>th</sup> laceration of some  
important organ or vessel - worst kind:
- 1 - Sprang artery blood & lacer w<sup>th</sup> artery.

D. Hare Tuesday Jan'y 4<sup>th</sup> 1820.

Ulexum Tartari per Deliquium - Carbonate of Sals.  
Carbonate of Soda are less soluble than the carb. of  
Potash.

of Carbon with Nitrogen - Nitrogen paper is  
common for a fixed to a fusible it. With Hydr  
& Carbon - called Cyanogen by Gay Lussac from  
blood - beautiful pigment - it is called Prussian Bl.  
It was supposed that Phlogiston combined w<sup>th</sup> Blood  
& fixed its blue colour - But w<sup>th</sup> f. l. & an acid  
called by Scheele Prussian acid - then n -  
Carbon, Hydrogen, & Nitrogen - Gay Lussac



obtained the base, cyanogen, by distillation <sup>201</sup>  
assembles Chlorine - forms acid w Chlorine.  
& also w hydrogen - forms salts called Cyanide  
Prussiate of Cyanide of Mercury - Burns with  
a beautiful violet colour. vide Henry for 4 ~~and the~~  
This gas is absorbed by alkalis & water in con-  
siderable quantity & hence proc over & then  
with Hydrogen constitutes prussic acid - Hence  
by distilling Prussiate of Mercury w Mercury  
acid the Prussic acid is obtained.

Sulphur. Sublim is the distillation of a  
solid from into the intermediate state of  
fluidity - Its comp & the reaction sub-  
which chemistry prod. It is concluded that  
Hydrogen is not essential to its constitution  
unites w the vapour of alcohol - Is a sup-  
porter & base of combustion - If sulphur  
exists in state of gas or in a better approach of  
combustion than oxygen. Is susceptible of  
2 kinds of combustion, slow & quick - In this  
respect similar to Phosphorus - Slow combus-  
tion forms sulphurous acid - To form sul-  
phuric acid we burn it w nitre - The nitre yields

a great quantity of oxygen to the sulphur.  
 Sulphuric Acid is 1<sup>st</sup> obt<sup>d</sup> by <sup>distilling</sup> fumes vitriol  
 & called Oil of Vitriol - & was made by  
 combustion of nitre in leaden chambers.  
 (Nitrous gas is formed which imparts its oxy-  
 gen to the Sulph<sup>ur</sup>, & is formed) Sulphurous  
 & Sulphuric acids diff<sup>r</sup> in energy  
 & their affinities - & form exceptions to the  
 law of turning blue veg colours red - it des-  
 trays them - Sulphur Chrysallizes -

Dr Cox's Lany 5<sup>th</sup> 1820. Wednesday 9 of Clock.

Pharmacy. Every art & science will mis-  
 lead us if they are without principles & rules.  
 Man's true glory is doing good. Intelligence order  
 precision are the groundwork of the apothecary's  
 art. What can be more disgusting the preparing  
 medicines in a slovenly manner? A good apothecary  
 an estimable character. The discovery of gunpow-  
 der came from the laboratory - Pharmacy is an-  
 cient as the world - First person must have been  
 his own Physician, Surgeon, & apothecary -  
 First cultivated in Egypt - see Woulapineid -



219

Greece Hippocrates, Theophrastus the father of  
botany. At Rome celsus lived alone for seven  
centuries - Dioscorides founder & Materia Med  
Next Galen, 7<sup>th</sup> Century Paulus Egin - They crow  
ded every thing into an elementary to cure all  
diseases - & 8<sup>th</sup> century 2 Period - Arabians -  
Rhazes - & others - & 12 century published their  
works - & 13<sup>th</sup> century knowledge & medicines  
introduced - & alone ~ 15<sup>th</sup> century anti & science  
advanced rapidly. Alchemists - Paracelsus  
invented many powerful remedies. Van Helm  
out de - Rosicrucians & Alchemists. Linnæus  
fixed Materia Medica on a firm base, by  
his classification - After intro of Pneumatic  
chemistry much simplified - If Empiricism  
& Quackery & be banished w<sup>th</sup> be more estim  
able. In the laboratories of apothecaries some  
of the most celebrated chemists have been bro  
up - Perfection & art - not yet arrived, is how  
ever stationary - Too many Galenic com  
pounds - better to discard them entirely from  
the Mat Med - than to call from them

204 Public confidence in ancient composition  
retards the advancement of the science.  
Proper studies for the Apothecary <sup>Medicine</sup> - demand  
a liberal education - how can a <sup>Liberal</sup> neglect  
of education which attaches disgrace to the pro-  
fession - Sh. know Latin <sup>Natural Philosophy, Chem</sup> & Greek - Geography  
Mathematics <sup>Geometry</sup> - sound judgment & experience.  
Natural History, Botany, Zoology, & Mineralogy -  
Matter is a heterogeneous compound of all man-  
ner in nature - 1<sup>st</sup> Laws of Matter are those of  
Attraction & Gravitation. Bodies div into 3 parts  
Minerals by Air & Water - Nature is  
in air - Next div into organic & Inor-  
ganic - Stone is in carbon since living matter.  
but living animals not live vegetation.  
Minerals - Some climes exclude the earth  
some temperate would the same veget &  
animals - Life is energetic in water in  
Chimities - Changes take place by transferring  
to different climates - Light has much influ-  
ence on vegetation - Evolution - Hotter &  
drier year more arid - even animals  
are numerous in hot climates -



Influence of age & sex is conspicuous. 208  
Natural History is very important a Physi-  
cian & apothecary. of Pharmacy Proper?

D<sup>r</sup> Hare Thursday February 8<sup>th</sup> 1820.

Sulphur recent Phosph in burning  
in two states - viz in a high & low temper  
The Sulph at a low temp is burnt  
out of gunpowder. In making  
Sulph acid is concentrated in leaden boilers -  
or Platinum vessels - 1 vessel of Platinum in his  
city or mine not held 15 guineas & cost about  
\$2000. Sulph<sup>ic</sup> acid consists of 3 atoms oxy-  
or 1 Sulph - Sulphurous 2 atoms - & it is  
supposed to be another acid or 1 atom  
of oxygen & 1 of sulph - It is by the obt  
but is supposed to form a decomposition  
sulphurets or hydrosulphurets -  
Exp to obtain Sulphurous acid gas - Dried blue  
col inst of reddening them & used to bleach  
animal subst, silk & wool - Sulph resin  
shopt is green colored but not pure colorless  
heavy oleaginous, nearly twice as heavy as water  
1-850. to water at 6.000 - Sulph acid 2 mals

of action. It does in act as acid by taking  
 the elements of water from substances as  
 Potash & decarbonizes. Water is essential  
 to its non-elastie state & can be kept of  
 it as vapor. Thinks it does not act as an  
 acid until it has a suff quantity of me-  
 to undergo decomposition. Decomp of  
 Water. No action takes place w<sup>th</sup> con-  
 centrated Sulph Acid is formed in pre-  
 sence until water be added. The reverse  
 is the case w<sup>th</sup> ref to organic matters -  
<sup>it</sup> must be concentrated to operate on them.  
 Quert how does Sulph Acid decomp - mat  
 Have says it decomp - it w<sup>th</sup> it first  
 enters into combination - or a galvanic  
 operation or polarity in their action.  
 H Hydrog comb - oxygen & H oxy - met  
 in the Sulphur - chimney also -  
 of Sulphates - diff a sol of Pot & iodine  
 $\frac{1}{16}$  a salt of Potash &  $\frac{1}{8}$  a salt of Soda  
 remarkable as Potash alone in a sol<sup>l</sup>  
 Sulphur comb & enters & reacts



forming sulphurets, which I have pref<sup>207</sup>  
ff forming Sulph Hydrog wh n m  
water - Sulphuret of Lime formed in  
a mass by combining at high temp  
& boiling under water - forms an un-  
der coloured solution - m b precipitated  
by adding almost any acid - Sulphuretted  
Hydrogen is evolved.

Sulphuretted Hydrogen is unfr a char-  
acterist & mite. Purple acid forms an  
one exception & ~~is~~ has of oxy being  
the main princip of acid - Unfr to  
detect Arsenic & alkalis - Its combin-  
w alkalis precipitates also every acetate  
Test of Arsenic - Sulphuretted Hydrogen - is  
D. Hare Day 7<sup>th</sup> 1820.

Sulph acid has an action on Copper unless  
when boiled & diff in this w a decamp of water  
the Copper decamp the acid & v. H and the  
Copper - Copper attr the oxygen & acid & sulph  
arous acid is given off - With iron & oxides  
the presence of water is necessary - Reaction  
decamp of Mass of Mercury & Sulph acid &

208 Common salt - There are 2 Sulphures  
of iron - one in Cuba @ Hydrate of beautiful  
gold colour. The other is that formed & below  
by fusing iron or sulphur. It may also  
be made by exposing iron filings to sulphur  
monoxide to the air. Sulphur dioxide Oxygen  
is stronger - affinity for water to form  
hydro - sulphur proper acid properties  
in destroying blue colours - Eff. Sulphur  
in vapour fusing gold leaf - Oxygen will  
not under the same prod the same to.

The Sulph. Hydro is a non-active supporter of  
Combustion. It is to support the base fire  
or support by the act of Sulph. & it acts  
as a sufficient quant of oxygen - can be supplied  
at such an immense distance under heat.  
Eff. Diluted Sulph. acid & Sulphur - in the  
production of Hydrogen, the Sulph. comb in  
it & prod. w/ Sulph. Hydrogen.

Another combin is the combin the vap  
of Charcoal & Sulphur - <sup>also alcohol of Sulphur</sup> they form a  
substance exceedingly volatile boils at  
105°. Difficult to prepare - Eff. - Boiling the



substance we had considered in it - <sup>209</sup>  
small part of Sulphur - It is yet an object  
of curiosity - is inflammable -  
No. Nitrog & oxygen in action can is far  
to life. It is not count we very select  
Exp. formation of Nitric acid - by exposing  
Sulph. acid to Nitric acid - Nitric acid -

D. Cove Saturday 8<sup>th</sup> Jan'y 1820.

Pharmacy, Requires a competent knowledge  
<sup>is the art</sup> Pharmacy teaches us how to know to choose, to  
compare & to combine those simple articles  
which form the compounds used in medicine  
derived from Pharmacology - That Hist teaches  
a knowledge of nat bodies - all our senses  
are brought into requisition. Pharmacy means  
whatever drives out disease from the system  
no matter in what way - The eye - Smell  
taste & odour tho' requisite is not sufficient  
other things are necessary <sup>by</sup> combinations &  
principles - Sh<sup>d</sup> know how to distinguish betw  
substances by 2 pieces of Rhci - The mode of  
preparation varies in bodies - & great care is  
necessary - Minerals are proc by Levigation

210 Marking &c. Vegetables cutting &c. Animal  
substances, boiled, washed dried:

Mixture is the proc of mixg simple substances  
to form comp. Pharmacy or Pharm. is  
int. Galenic & Chemical - Galenic meant  
only to collect substances & analyze

Chemical is per used - divided in

Pharmacy divided in Veg, Animal  
& Min Pharm. & 1<sup>st</sup> Vegetable Pharmacy  
Veg has fewer organs than animals, & nour-  
ished by absorption & intussusception.

Veg is comp. of 5 dist parts - viz Roots  
& tooth, leaves, flowers & fruits. These  
are again divided - There are 2 kinds  
principles 3<sup>rd</sup> various fluids. Veg principle  
is extracted by wine, acids, alcohol &c &  
is perfected by analysis - Homoeop. &

distin dif. kinds of analysis - 8 kinds

1<sup>st</sup> Natural mechanical analysis - as

2<sup>nd</sup> Artific Mech Anal. 2 kinds - 1<sup>st</sup> by  
powdering & 2<sup>nd</sup> <sup>when</sup> removed. & compact to in-  
creased firm not a longer living

3<sup>rd</sup> Analysis by fire - obt. mineral, copper



toxicum will be -

4<sup>th</sup> Div is Analysis by Combustion or converting them into salts - alt H & Alkalies & neutral salts & metals &c -

5<sup>th</sup> Analy eff & med of Water - by Macerated Boiling - &c

6<sup>th</sup> Analy by acids & by Salts - this helps and operates on them various &c - & different veg acids opt - owing to Hydrog & Carbon the bases of veg acids - Analysis

7<sup>th</sup> That effect by means of the products of vegetables as &c &c -

8<sup>th</sup> is by Fermentation - There are some modifications by Theophrastus - Vitis orfila contains all that is essential in Practical Chem.

~ Immediate Products of veg abt by analysis. First procured by incision - next broke, filtration & distillation.

Remained Prim & being numerous - they in few words - 51 of Laps. Chiefly indebted to Vauquelin - Chiefly water & volatile matter & but little extract - also contains an

an acid but count but free.

Tannin, &c also contained - By also contain parties vessels running in leaves & roots & it diff juices. It by incision.

Gums resins &c - differ what count of principles some peculiar & up - as Benzoin Oxalic acid.

2<sup>d</sup> Principles in Gum & Mucilage  
Gum is thick transparent tasteless soluble in water - Gum from Acacia, Cherry Tree gum &c. Gum is brittle & easily pulv affords acids from acids - The delicate parties forms in gum - white flaky precip is the best test - Nitric acid convert it into malic sac. - lactic & oxalic acids - is soluble in water but not in alcohol. Mucilage is f. roots leaves seeds &c. Mallows & an are all can be cut by f. Mucilage

3<sup>d</sup> Sugar - f in lig, carrots, beets, flasks & fruits as pear apples &c. & in in seeds as cerealia, in milk & urine.



sweet, phosphorescent, forms the basis  
of sugar candy. Syrup is juice boiled w  
sugar. Comb w 8 neutral acids & alkalis  
is soluble in water than alcohol.  
It is the med & solution of oil in water.

Carbon & sugar & Hydrogen is contained  
in it. A mixture of starch & water & Sulphuric  
acid will form sugar. Sugar is obt for  
a mushroom like & Mannin is sugar  
sugar and - Phys & apothec.

4<sup>th</sup> & the Vegetable acids - Known by reddening  
the - Lavoisier says double base hydrogen  
& carbon acidify by oxygen - only takes one  
proportion  
acidify acidify. Vine in differ ages cont  
diff acids is malic then acetic & does in  
retrograde - viz -

5<sup>th</sup> Secula or Starch - when fine is of  
fine white colour - is insoluble in cold  
water & forms jelly w boiling or hot.  
Does not form sugar - w oxalic acid - Iodine  
is the test of starch & c & vice versa.  
Found in various fruits & w abund in

wheat. Sago fr Palm, Salep, Mucilage  
 6<sup>th</sup> Starch - contains also Nitrogen.  
 Peel small & tastes - is insoluble when  
 fresh & soft in Alcohol - is precip by  
 Water & forms lute or lime - detect  
 in diff. articles - Rice, Rye, Elder,  
 grape, Row, none in the potato  
 & hence a r in bread of potatoes - forms  
 yeast.

7<sup>th</sup> Oils - Carbon hydrogen & oxygen - 3 fold  
 Fixed, volatile, & mixed. Have differ  
 of of Hardness owing to oxygen - Diff  
 in action and. Volatile exists in the  
 plants & gives smell to plants, form  
 soaps - 4<sup>th</sup> are soluble in alcohol -  
 Diff kinds - light & heavy vol oils - colour  
 diff as yellow, brown, blue green &c.  
 Very numerous - exist only in partic  
 plants - Angelica only one in oil is  
 contained in every part. Fixed oils  
 are obtained by expression - Volatile  
 oils by distillation no sugar form ole.



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saccharum. When exposed become hard.  
dissolve resin - separate gold fr Nitric  
then solution

8<sup>th</sup> Camphor - *saipharis*, found in many  
plants - principally a *Laurus Camphora*  
Is volatile & combustible & def - w Nitric  
acid forms a fee fluid. By distillate  
from Nitric acid obt Camph acid. Dissolve  
in alcohol & unites in water - w Sulphur  
acid forms artif tannin - It diffuses in  
milk & w if jiv it - Artif camph  
is m by add <sup>good</sup> mucous acid to oil of  
Turpentine - & w no other oil.

9 Gum resins - dissolved in dilute alcohol  
& cannot live betw gum & resin -  
for deriv fr the roots by incision, 3 kinds  
or orders 1<sup>st</sup> where gum predominates 2<sup>nd</sup>  
where nearly equal & 3<sup>rd</sup> <sup>w</sup> Resin predom  
inates - one in the prod of Convolv  
ulid & Umbelliferi - Vinyg & mine  
only partially dissolve them - Sulph acid  
converts them into artif tannin -

216 Some <sup>say</sup> Resins are volatile vis-  
ciferous - low melle, heavier &  
water, non - cond of elects. Soluble  
in fixed & vol oils & fat - acids also  
convert them into artificial turpentine - Can  
be type Carbon & Hydrogen - Not soluble  
by Sulphuric Ether.

10 Balsams - obt fr certain trees by incision  
& contain Benzoic acid w<sup>th</sup> disting them -  
fr Resin n<sup>t</sup> to be obtained by distillation  
Benzoic acid is a constituent in Bals Capivi.  
Some solid some fl - Benzoic Storax &c

11 Coontchouc & Birdlime - is vegetable  
principles obt fr palm - W<sup>th</sup> 1<sup>st</sup> process  
is milky & dark colour to an  
specific grav is less & water, mixed in  
water & softened in Boiling water - & n<sup>t</sup> to  
worked into any shape - by filling w<sup>th</sup> mud  
black sand, & type its mould & put it  
into boiling water & w<sup>th</sup> hot press it  
into any shape & put it in gun, dry  
it & let it grow cold - used in gunpowder.



is when large for Glysters - Is insol in Alcoh<sup>ol</sup>  
but partially soluble in Ether - Exists in  
Milethe, Mustick & was at plants -  
It is separated fr Resin by Alcohol -

D. Hues - Monday Jan 10 1820 -

Sulph Hydrogen is a test for all the metals  
except iron, nickel, cobalt, ~~tungsten~~ <sup>manganese, titanium & tellurium.</sup>

Exp - Precip Nitric of Lead by Sulph Hyd nat  
Brown precip - Exp 2 - Solution of copper, greenish  
precipitate - Exp 3<sup>d</sup> Litmus - reddened -

Exp - No precip w Iron - But if the alkaline  
sulphuret be added a copious precip, black ensues.

Hydrogen - forms another comb w Sulph called  
Sulphurated Hydrogen - or Hydrogenised Sulph<sup>ur</sup>  
Alcohol of Sulphur or Sulph w <sup>Carbon</sup> Hydrogen  
inflammable, boils at low  
temperature,

Nitrogen - or azote forms important com-  
pounds - not so easily produced as w sulphur -

Mysterious compound in nature - Nitric  
Acid is det fr Nitric by Sulph Acid -

1<sup>st</sup> Comb is the Prot oxyd - or Gaseous oxyd of Nitrogen -  
or Base atom of oxygen & 1 Nitrogen -

or Nitrous gas

2<sup>18</sup> 2<sup>nd</sup> Nitric acid - one atom of oxygen more -

3<sup>rd</sup> Per Nitrous Acid 3 atoms - exists in  
comb or in - alk & metals, but  
obtained separat.

4 Nitrous Acid - 4 atoms -

5 Nitric acid - 5 atoms oxygen -

of H Nitric acid is imp both in Phil's  
& artst - 1<sup>st</sup> obt by distil Nitric or clay - by  
Raymond Lully - When pure distilled a  
nitrite is obtained - Cavendish & Lavoisier  
formed it - Another mode is by Ammonia  
It must beavier than water - varies in diff  
circumstances - has to obt as high as 1.62 -

1-5 - Drier the Nitric the better - Water is nec-  
1. its being in a liquid state as it is to  
other acids - There are about 22 parts of  
a Water of 8 & about 1/5 of Nitrogen in  
acid in commerce - When concentrated put  
heat or water & when diluted cold or ice  
& snow -

Like sulphuric acid the strongest nitric acid  
will not act on metals - Eff or even



to prove it - added water & decomposed -

Nitrous gas is given off - & another portion combines w<sup>th</sup> metal - Sulph. acid & a part of its oxygen & hence diff. fr. Nitric.

When boiled w<sup>th</sup> Copper dissolves it -

Expt - adding Sulph. acid & Nitric acid in combination to oil of Turpentine. The more concentrated the acid the more violent the action on Vegetable substances - Sulph. acid

acts by depriving Nitric of a portion of its water - The red fumes must be an intermed. state acid betw<sup>en</sup> Nitric oxyd & N<sup>2</sup> acid - It

can be obt<sup>d</sup> by the acid by distilling Nitrate of lead <sup>in a retort</sup> uncondensed or cold - varies its color

at diff<sup>erent</sup> temps - Colorless 25° below zero -

Specific grav<sup>y</sup> 1.451 - Turns w<sup>th</sup> skin, boils at 68° & red orange fumes & tart acid. To liberate the


Nitrous gas add heat - & receive it vapor over water which becomes colorless - Expt - formation

of Nitric & O<sub>2</sub> - rec<sup>d</sup>. under a bell glass -

Nitric acid becomes green w<sup>th</sup> mixed w<sup>th</sup>

water - Best to obtain it from Nitrate of

220 ammonia & is converted into water  
& Nitrous oxide entirely. Used in Eucio-  
sty - but not accurate & different compounds  
will be produced - it comb on  $3\frac{4}{5}$  atoms  
of oxygen & hence imperfect -

New Eucioanite -  - Nothing in  
chemistry is more difficult to understand than  
these combinations - Nitrous gas does not  
support combustion, Nitrous oxide does -  
supports respiration & even vital power -  
Exhilarating - It's deleterious because it forms acid  
in oxygen - Nitrous oxide does not - Nitrous  
oxide contains less oxygen than Nitrous gas  
Proven by exposing Nitrous gas to iron filings  
& converted into Nitrous oxide.

D. Gibson Tuesday July 11<sup>th</sup> 1890 -

Curled Spine - noticed a curious 1" animal  
described by Pott - in 1 pc at all ages - Child  
in subject under 3 & 10 yrs - Symptoms long  
with spasms, twinges & stumbles, crosses his legs - & twinges  
or spasm - pc in bed - when sitting legs are  
drawn up. But no appetite & not otherwise voracious.



soon after there is paralysis & lower limbs,  
pain in the back & breathing difficult, tightness  
in stomach - always present. When in adult 1<sup>st</sup>  
course of numbness, coldness & rigidity in extremities  
& paralysis - bl & rect & no erect penis - Carver  
then urines & abscesses form with externally. Vide

Pott. "Superior Dorsal Vertebrae unfree affected -

Pott 3 for states 1<sup>st</sup> Small - 2 great enlargement 1834  
is truly curious state & bones - Thinks Pott wrong  
in saying that no luxation takes place & in not  
using any thing to support the spine -

Dr. Gibrian thinks there is secondary luxation  
owing to absorption of the spine & also proven  
by Paralysis, which only happens when the curvature  
is considerable & not due to luxation -

Pott is also wrong in supposing it a common  
paralysis -

Causes - Predisposing & exciting - Predisposing - peculiarities  
of Constitution - Scrofulous diathesis, but in some  
cases no such appearances - Thinks some constitutional  
peculiarity must exist - Some say it is owing to  
imperfect ossification - Mrs Bonhomme -

222<sup>8</sup> Exciting Causes - Many - Blow, Muscular  
excitation, falls, Ruptured, But one circumstance  
not to be in infl<sup>d</sup> & many other - Cause - Suppression  
of diseased vertebrae - Surgeon is called & finds  
curved spine & dis or carries vertebrae, - Here, the  
supernumerary vertebra adds increase of irritat<sup>n</sup>  
& 7/10<sup>th</sup> die from this cause, viz the Surgeon  
permitted to interfere or not.

Clare - Mayan & Petit<sup>2</sup> attempted the cure  
by machinery - <sup>2</sup>Best Le Vachet of Paris one method -  
announced in 1768 - in 1788 Jones claimed this  
invention - Vice Bell - The bucket & Stays -  
& lower portion used to make joint stiff & pull  
upper portion rises round the shoulder in any  
form - a Port part is upright p. of iron  
with straps - Best apparatus - & Tho<sup>1</sup> Pott's treatment  
is the best his treatment not proper -

Pott says his bone healed w<sup>o</sup> no operation - but  
already disposed of it - he 2<sup>d</sup> 9<sup>th</sup> says it bones join  
may & if displaced it are dislocated -

4<sup>th</sup> Pott says sometimes if we are - or separate the  
spine or twist it - But machinery is only



for the purpose of keeping the spine in its <sup>223</sup>  
proper place, to support it & not to stretch  
it - This can be done so long as spine  
& transverse processes remain - Must make  
support on the pelvis or hips - Sir J. Earle -  
has published in favour of machinery & Pott  
himself confined his patients in bed, for the  
same purpose - & hence the utility of machinery  
Must not depend entirely on machinery  
but Spices are the best - Dr. Cameron has  
noticed in Hippocrates his spine cured by abstinence  
& used it successfully - After this Pott used them  
for many years - Can not remove the  
curvature Pott says & Gibson thinks this was  
owing to want of opposition to support the  
spine - Mr. W. Caustic & Piers - &c - keep  
up diet during the whole cure - Also Dr. Phipps  
with Peruvian bark diet & Pumping extremely useful  
against Machinery -

224 Dr Hare Tuesday Jan 11<sup>th</sup> 1820.

Hypo - Sulphurous acid - 1 atom to 1 of oxy.  
Also - 3 acids of Nitrogen - Per - Nitrous - Nitrous  
& Nitric acids - & 2 oxides Nitrous & Nitric oxide  
Nitric oxide has the properties of oxygen & it  
Nitrous though it contains more - Hydrogen  
& Nitrogen form an alkali. wh is different fr  
Sulphur & Hydrogen - Tho' a candle was extin-  
guished in Nitric oxide Phosphorus burnt  
rapidly when ignited - Nitrous oxide ought not  
to be kept over water as it is absorbed but  
m<sup>t</sup> be kept in demijohns soon after it  
is made - Nitric oxide is best obtained from  
the Nitrate of ammonia - & not Nitrate of Pb.

Nitrates - contain water, give out oxygen  
Nitrogen gives carrier or it its caloric  
& hence its fulminating power. Nite of  
ammonia m<sup>t</sup> be best to make gunpowder m<sup>t</sup>  
but too deliquescent - It m<sup>d</sup> not dirty the  
gun as common powder, wh supersedes  
of Sulphuret of Potash - Gunpowder 5 wt  
1 potash & 1 Sulphur - Calc Sulphur & Nitric  
2 Potash & 1 Sulphur



Muriatic acid, marine Acid & now  
Hydrochloric Acid - obt fr common Salt  
by Sulph. Acid - Will only condense in Cambr  
or Water - formerly wff 1 contain oxygen  
but now is comp. of Hydr & Chlorine.  
Exp - Form of Muriatic acid - When exposed in air  
fumes are sent off its acidity for moisture.  
Is a permanent gas over mercury.  
Exp over water - at first comes without heat  
but afterwards requires heat - at first atm air  
is driven off but wh pure HCl acid gas is  
given off it is rapidly absorbed & but little  
escapes - Exp - Solution of ice in HCl acid gas -  
Ammonia produces the same effect - rapidly absorbed  
Exp - Adding ammonia gas to HCl acid gas for  
solid salt. In this case a solid is formed white  
colour is given out - Some say that it is not  
given out but remains in the compound.  
Ammonia forms the basis of the most  
powerful pulverizing powder - viz Silver.  
Same effect w<sup>d</sup> take place for Carb acid gas -  
I believe by adding HCl acid to black oxide

226 of Manganese produced Chlorine on  
Oxygen acid - Accn old theory it was de-  
phlogisticated & Scheele or more correct, Ber-  
Lavoisier who supd it a simple substance.  
Sir H. Davy supposed it Chlorine & Hydrogen from  
the Muriatic acid - But he says Chlorine has  
no Hydrogen. Bleaching -

Subsequent facts strengthen Davy's view - Iodine  
Oxygen acid & Sulph. Hydrogen - or acidify  
principles. He also found the Chlorine  
combined in 2 proportions <sup>or oxides</sup> & by others to  
form 2 other acids besides these oxides.  
Thus Muriatic acid forms 3 oxides & 2  
acids.

Dr Cox Wednesday June 4<sup>th</sup> 1820 -

Pharmacy. might enumerate other articles  
as extracts, tannin bark &c - but we are in-  
vited - will then proceed to consider the principles  
of the Mineral Kingdom - Locomotion distinguishes them  
must say not so the head off by analysis by  
subjecting them to diff processes - Gelatin  
Albumen, Phosphorus, &c. constitute them



In animals then principles are not so isolated  
as minerals - When poss<sup>ble</sup> some in common  
obt<sup>ain</sup> pec to one of them oils, Nitrogen - pec  
to animal - Albumen gelatin & diff analysis  
1 Mechanical analysis - by this we obt insulated  
the external & internal products as hair hair  
skin, & teeth & inter milk &c - from bird  
down feathers &c -

- 2<sup>d</sup> is Heat by Water, obt gelatin & fat &c -
- 3<sup>d</sup> by Alcohol - obt Res<sup>idue</sup> from, as extractum
- 4<sup>th</sup> by acids & alkalis, for Nitro & soap.
- 5<sup>th</sup> by Heat infer to Boiling Water - diff volatile  
oils.
- 6<sup>th</sup> by Combustion - obt H<sup>ydrogen</sup> Phosph<sup>orus</sup> salts.
- 7<sup>th</sup> by Fermentation & is gases -

3<sup>d</sup> Mineral Kingdom - furnishes many fine  
apparatus rec to every analysis into  
effect - 1<sup>st</sup> Commodious buildings, w<sup>ith</sup> tables  
scales, weights, above ground & current of air  
& collar volatile subst<sup>ances</sup> in a safe.

- 2<sup>nd</sup> a Laboratory - vide Henry -
- 3<sup>rd</sup> a Shop to sell out medicines - This contain

228<sup>8</sup> apprent. have counters, press, scales,  
t. clock or a clock for seasons etc. & sh<sup>d</sup> only  
encourage such apothecaries. I must advise  
let him attend # prescriptions & Pharmacop-  
Warren Room & Garden of raising plants  
order & sobriety of expenditure requires in the kitchen  
filters etc.

Instruction of Pharm the 1<sup>st</sup> div into Processes  
Vessels & vessels Proper - Processes very necess-  
different kinds of furnaces - viz. Henry -  
Vessels are of 3 kinds - 1<sup>st</sup> Mortars, crucibles  
still retorts, sublim, distile, &c. retorts alum-  
biers - 2<sup>nd</sup> Recipient vessels - 3<sup>rd</sup> Vessels for  
Preservation - Instrum<sup>t</sup> & divided into those of  
Hand - or sieves, cutting instr<sup>t</sup>, mortars, of  
dif kinds, Slaps - Hydrostatic balances, Hygrom-  
Barom, Thermom, siphonous - Also Chem-  
instr<sup>t</sup> Pipin digest, moulds apparatus -  
Sieves - Fanc. imp<sup>t</sup> and anaf. Moulds.  
a hand full - Pipit between finger & thumb.  
Ama. and Aa - each - Pa - partes iguales - 2 S.  
2 V as much as if plena - 3 A as much as



13 1/2 cup Bath - Rg - Cochlear - i j iij m<sup>229</sup>  
or Min. Cochlear - Gutta - M. Fiat.  
other terms - 1<sup>st</sup> Mechan. Division - action is, from  
sted. Examf Chene & Vitruv Actio - eff. by cutting  
plying termination &c - Pulverization effects in  
moisture of diff subst - Copper m to prohibit.  
shd to cover of pliable leather? Dry subst &  
subst m to moist not proper - m not add  
to cohesive subst - tell dry subst m to pres  
dried - Woods water Bath so m to prevent.  
Camp is easily powdered by adding alcohol  
to aromat upon the heat - Bef pulv stone  
subst m to heat & ply in water - Metals  
by Heat & alloy or welding - Ground better  
stones, Levigation dif in dry water to trite  
granulation - in metals, by panning in water  
or rubbing while mallet or chalk - Mecla  
separation by sifting - compound staves -  
to get fine parts. Electration - to separate  
fine parts by flumes - Decantation - to  
sep liq fr solids - <sup>the paper is save by</sup> Filtration - oils, stained  
flamum for soich, & line for salts.

230 R. N. Blotting paper. 3<sup>d</sup> Expression. betw  
boards, staves &c. Despumation - practised  
on those subst containing mucus &c.

Clarification - Calcination at present impl  
converting lime into quicklime -

Cementation is uniting one body w  
another - Thus Carbon & iron still.

Cohabitation. carrying back the distilled wts.  
by Combustion - the form of new bodies.  
either binary, ternary, quaternary -

By Combustion is the union of Combust  
body w oxygen - Combustibles two kinds.

Simple - & Compound - Concentration is  
the nearer coming of diff subst together by heat

by Condensation is when it converts into solid or  
dense solid - By Cupellation - metals are sepa-

rated from each other - By Chuvellation is  
when it expels decoction - It is a more subst.  
in this water is necessary - but Coction is a

very additional water - by Decapitation is when  
it crackling and fired by shivering & c & c

Deflagration is rapid combustion without noise



by Dehydration is carrying off water parts. <sup>231</sup>

Depuration - Defecation is exp of wat parts  
some chem change takes place.

Deoxygenation reverse of oxygenation.

Detraction - rapid infl or out. Digestion is  
prolonged diffusion - for sev days. Dissolution is  
the result of Chem act. by the Solution is only a  
simple diffus by diff bet to properties.

Evolution is on the contrary also a partial infl  
by Caloric - Effervescence - a body displaces a gas -

Efflorescence - depur of wat if things tally.

Extraction implies abstr to unmix from up of bod.

Fermentation - divided into various. Acet. & Putref  
but it is an hint - same action in different  
bodies - Chem affin govern the process - Fusion  
with aqueous or igneous salts & metals.

by Incineration nec result of combustion -  
or formation of ash. Levigation same as

Porphyrisation - Lixivation is ext saline parts.

Lotion is simply w to which I div it of unperfected

Water wine alcohol ether - Maceration also  
eff a temp & atm. Precipitation is the res

of chem act by wh our body is decomp  
 & falls to ground. Reduction or Reversifac  
 is esp happy for bad, partic metals - Sublim  
 ation in dry distillation - N & H princip  
 Lems in Pharmacy - m to m numerous.

D. Olson - Thursday Dec: 8

Morbid Coxaried -

D. Hare - Thursday Jan: 12<sup>th</sup> 1821.

Exp 3. Posing. Muriatic acid in Citrus & adding  
 red lead - Prefer to doct of Lacy - Mr Murray says  
 that the Oxygen acid is a comp: of oxygen w an  
 unknown base & with hydrogen forms Muriatic.  
 & has concluded the most important question -

Exp. Common gas & Chlorine gas. White smoke  
 & flame - Chlorine later, O hyd, & form blue  
 acid wh cannot be removing alkalis -

Hydrogen & Chlorine wh exp a tan for vlla acid.  
 Or Citrus destroy, the colour. Besides this Chlor  
 of imp count w red carb. w oxygen 1<sup>st</sup>  
 Euechlorine, is formed by distilling Chloride of  
 Potash w muriatic acid - M to be prepared of  
 Mercury with Chlorine can not.



M. to decomposed by per. mercury - and Hg.

It dangerous - no efflor takes place -

M. is combustible, is decomposed & forms, combi-  
 2<sup>d</sup> Deut-oxide of Chlorine - is made by adding  
 Sulph and M. to oxygen of Potash & distilled -  
 dangerous up to explode - it not raise the  
 heat above boiling -

Chloric acid from called Hyperoxyminates  
 is obt. by M. Barytes or Chlorine - & two  
 salts are obt. - Murex & Hyper oxy - & are  
 separated by boiled M. Phosph of Silver - Sol  
 comb. Murex acid

no small reddens veg col  
 & decamp by light -

Per Chloric acid is formed by distilling Sulph  
 acid or Hyperoxyminates - Has not as yet  
 obt. by many chemists - French chemist  
 can't get results - Oxyminates or Chlorates  
 are very interesting - Forms beautiful Phenom-  
 The <sup>Oxy</sup>gen of Potash is formed by forming it acid -  
 & pass it to alkali - M. is separated by its insolubili-  
 ty - in M. Phosph of Silver -

Chlorine & Nitrogen is a curious in its  
 tetan power - Many persons & sufferer -  
 Sir H. Davy & Dalton - is obt by passing  
 Chlorine thro' ammoniac - comb w nitry  
 & forms an oily fluid - tetan w eff - &  
 when touched or decomposed -

Chlorine does n comb w charcoal -  
 & hence wonder at considering it a comp  
 f oxide - & try only to Menzies theory -  
 Yet will form a triple compound w  
 oxide - w J. Davy calls Phosgene or  
 French Chloro Carbonic Acid -  
 also form Olephant gas - or oil w Chlor  
 hydrogen & sulphur - is now consid  
 nat n ether - as formed fr acids -  
 Sulphuric acid - except a vola  
 D. Liban - Friday -

Sprain - important particularly in Scroful habit.  
 synovial joints suff n than other, ankle joint  
 most. causes not a consequence - After - 1<sup>st</sup> can be  
 wth - as swelling is consid - w. or leeches n put - after  
 this cold appl, lot n cast of lead - & frg removed - When



in females - in an undecalcified species during menstruation - 235  
or in other if a link to cold - after this Blister - inflamed  
part - & thin embroc - Opodeldoo & a little Sassafras - Red  
pepper & sweet oil & soft Soap - the more the joint  
is free ankylosis - when swelling without embroc  
Anchylous - Causes various, fractures dislocations &  
Complete & Incomplete - & when ends & bones involved  
or dis - others, not - Treatment diff. in a kind - If by  
a venous adhesion or deposit of Cough lymph the cure  
by moving the joint & friction - Knee joint, elbow  
wrist & all joints are liable - But, bones grow to-  
gether - Where bones & joints no cure - cures itself -  
if broken up will destroy the patient - In other cases  
oil of Turpentine & Capsicum & Sweet oil - Issues  
removable but not of anchylous - Trochanter  
joint is very necessary - It? not cure it & put them  
of Substances bony or Cartilaginous within the joint  
in leg & knee, elbow, ankle & jaw - Waller & Wray  
May - in leg & knee, but a large - Sir E. Bland  
Pallett - few at the edge - Pear round or lentic - Occ in  
unusually - but in pain, until interposed between  
the ends & bones - But occurs infl - Diffic to supply  
Arteries - An suppurative effusion of Cough lymph -

236 but forms on the ligament. motion in the  
capsule a joint - See on 1<sup>st</sup> by efforts of equal  
ligament & then are reunited by ligament covering  
a capsule a joint - Treatment - but loose cap. of  
quilted cap. to prevent motion & useful also to  
keep the tumour off of the joint - See J. B. Roussel.  
Where can't felt bandage of rec. are - J. M. then  
removes it, if it prod. an infl. - Death has occurred  
fr. infection & an abscess - J. M. did open the  
joint once & sent a very large - Prepared on the  
condyles, made incision over it & started out, incision  
healed & got well - He<sup>d</sup> on small incision, above,  
& not indeed finger or instrument - But also the  
capsule is an inflame. Rheumatism all exte.  
a lower part, Rheumatism upper, best - Sent urine  
fr. Infl. or Rheumatism - best to exclude inflame  
1<sup>st</sup> & then operate - use bandage to press on  
Hydroarthrosis or Dropsy a Joint - occurs fr.  
in strong & muscular persons - but fr. Rheumatism.  
From it poured out & even elevates the patella  
turn on each side, in an pain - Causes - death  
of Calvaria below secret & absorb. also often  
Tophi are not in bone & free off in debility.



Blister. Issues, &c - not useful.

Wh not effective, in let out the water in  
Noctua, on either side, & obliquely in valvular.  
represent the admission of air - as trial infl or succeed.  
In some cases can be cured as in Hydrocele - in such  
cases one or two slightly stim injections - Bandage  
or sometimes cure - Commenced a foot - prevents  
distension & renders comfortable

White Swelling - in freq wh scroful patients  
also a females in bottles & 15 or 17 yrs old -

Knee joint in bottle - Pain w swelling & joint  
white & integ w changed. & commences tumor  
inside & outside a Patella - Knee spherical in  
no pain. when tumor inc in pain & keep it  
Knee bent, inside & out - find inc & becomes  
enlarged - joint above the patella & in pain & up  
for a Tibia - Wounds up enlargement & bone  
but not so - new effort &c by carries a latter  
stage & dis - on dissection thickens - ligam  
& Cellular membrane. & effusion - Bone not dis  
Very Analogous to Spavin & horse -

Treatment Diffic to Cure - Also arises fr scroful  
& gen fatal - in early stages - W. Ceecher Blister

238 Issues - Blisters best. but prod strong  
then issues - Refr limb extended - & at rest  
& up around the joint. Not successful  
& condition is declin in apartment. Not  
there is prospect of recovery in arm - C Bell  
recommends a suture to procure anchylosis.  
3 Cases - 1<sup>st</sup> passed under the ligam. & Patella.  
2<sup>nd</sup> Case Passed under - Capsula Ligament.  
3<sup>rd</sup> Case - also p. H. H joint & successful.  
Wh in infl. D. P. thinks too in infl. in the  
produced.

<sup>Dr. Hare, Treason</sup>  
Euchlorine is Hyperoxydized acid.  
Prepared in gas, different from Chlorine  
as it is not absorbed by mercury - is const  
of Chlor & oxygen gas - explodes very easily.  
& is decomposed into oxygen & chlorine which  
combine & mercury - it is a yellow  
colored but after explosion is white  
effs - Phosphorus combined w both &  
produces decomposition & explosion.  
Exp - Dental gold - copper & tin - explosion &  
decomposition from the effs for both met  
is interesting as it shows an light upon



The nature of Chlorine - Chloric acid being 239  
composed of oxygen & an unknown base -

Theory of Chlorine - in addit to this 2 more reasons - salts & acids, when lose its properties, & again become acid is a strong & Hermand base of late oxygen & then acid. That ascent of it will compound is not Chlorine. Rationales -

Production of Chloric acid gas - heat for salt & oxygen - Chlorine can't like oxygen & Phosphorus & Sulphur & when water is added Chloric acid & Phosphoric acid is produced -

With Carbon dry no action, when moisture Phosphoric gas -

Action of Bleaching, destroying ~~the~~ color  
offensive odour - Rationales of its union with  
alkalies & metals -

Chloric acid prod & decomp of Barytic  
water - Rationales -

Euchlorine is obt fr. Chloride of Potash diluted  
with water & exp to heat - elem exists as salt -

Rationales & exp fr Charcoal & Phosph &  
chloride of potash -

Expn high Chloride of Potash under water -

240 by Sulphuric acid & phosphorus.

Exp. Pouring Sulph acid on Phosphorus.

Exp. - Turbidity & Chloride of Potash with  
by Sulph acid - These views of Oxygen.

acid and. And a new view of the Union  
when by Chloride, when moistened Unions.

Some Chlorides are insoluble by Silver &  
Cobalt - Lime - W ammonium Chloride

C or combine.

Gen Character - Sulph & Potash

Sulph & Potash by Barytes & igniting them

W. Charcoal - Some Sulphates very insoluble  
Sulph Lime however ignited Sulph of Barytes  
& Barytes decompose - Alkali or Potash  
& or Charcoal Sulphates are formed.

Sulph Barytes or  $\frac{1}{3}$  Charcoal & a little  
oil & add exposing to heat for an hour  
it then readily soluble in Nitric acid.

Pure Soda is all in this way -

Nitrates - are decomposed by heat & become

when ignited & combust.

Aluminates not decomposed when ignited  
but they solutions of Silver.



Tests. Zpp - Mixture of lead & mercury, also 241  
tests of clean air - Purify Mixture of Clean  
it can't mix so as by the Mixture of Clean &  
Lead. Dr Thompson's Clemency best - & made  
taken for that Dr Bauche.

Dr Cox Saturday Jan 15<sup>th</sup>

Pharmacy - On the Preservation of Medicines  
Medicines are easily preserved. Again they are diff  
veg m b kept in 6 different ways. Sugar, salt, desic-  
cation - &c. 1<sup>st</sup> of Preservation in their Natural  
State, - Pulpy fruits m b preserved for an time -  
Dr<sup>d</sup> be pulled before ripe, kept above the surface  
a pound, in a suitable temperature, & upper part  
be m<sup>d</sup> be kept free from damp air - It is 1<sup>st</sup> that  
a linen cloth will keep them for freezing  
2<sup>d</sup> of Preser veg in Sugar - roots stalks flow of  
preserved by boiling in Sugar, or ginger lemon &c  
3. of Brandy - Plums apricots, peaches &c - w sugar  
4 of Pres by vinegar - m a Pharm proc - Pickles - Vin  
you dip the water of Vegetation & preserve the  
This water unites on a portion of the vinegar  
& weakens it & sh<sup>d</sup> be poured off & m added -  
5 of Br by Brine or Salt m used in air

242 m after by desiccating, & n. b. depend  
upon something else mysterious - as few  
forms of Corrosive Sublimate n. preserve a long  
by Desiccation. Depend upon if some accept mod-  
ture - Diff. circ. need to be att. to - Different  
degs. of temperature are necessary -

Manipulations of Phann resolve them into  
analysis & synthesis -

4. Modes of Analysis - 1. Mechanical analysis -

2. By Reagents, 3. by Caloric, 4<sup>th</sup>

1. By Reagents on disc to constit. of bodies - n.

consider it the principle key to chemical  
knowledge as all the processes or changes take  
place thro' their means - important Physician

Principal Reagents 1. Watery infus. of Blue veg

we send green by alk & red by acid - Yellow  
becomes brown - It are used to ascertain

the presence of Arcanic acids -

Alkalies - test acids, Armon det copper

& or copper, tests arsenic - Sulph. acid dit

tin, zinc, lead, Magnesia - Nitric acid det

Phosph & Carb. nated Salts - <sup>ref. copper</sup> det gold

Gypsum in white lead,



- 243  
Mm acid silver, oxalic lime.  
4 Ventral salts in alk & earthy bases - infus  
5 Metallic salts inf - Nitric Silver, murex  
& murex acid, Corros Sublim Albumen.  
6 Pure metals det Sulph Hydrogen - Pure  
Silver Ammonium to be black - f.  
7 Sulphur & Hydrosulph det certain.  
8 Alcoh & Ether det salts, cannot dissolve  
sulph salts, & precip them in alkaline water  
in to use in flammable salts.  
9<sup>th</sup> Water & Wat solutions, inf as tests &  
to form solution - det oxide of Bismuth, or  
Algaroth are precip also called sub-nitrate -  
strata of Super nitro nit is diff & oxide is then  
down - Bottle of Ant or Alga  
10 Albumen flutur & det turning to -  
of Simple Bodies - call them simple or not  
in decamp - or prob all to be compounds.  
about 60. Simple subst. Light, cal Elect Ph  
oxygen Oil Iodine & Fluorine - etc - Clapud  
Simple combustibles - 1<sup>st</sup> sort as form acids.  
2<sup>nd</sup> sort as form alkalis - 3<sup>rd</sup> sort as form inter  
med subst - only not the same or Pham

244 Compounds - divided into Prime & Second  
alcohol binary, ternary, quaternary -

1<sup>st</sup> of Light - app 16 active in prod cast clay  
some precip are changed by it as Cal & red Prie.  
& H<sup>2</sup> to pres by cov in black paper. on dark  
Hydrogen & Chlorine for Burn with a Sun -  
Franklin says in a dark about light.

Coxe thinks is now to solar origin & suppose  
agent entirely, adopts Descartes opinion

1 Light eman in all direct - below 104  
000 miles a second, 3<sup>rd</sup> Impenetrable.

4 is Reflected & deflected, 5 rays of h

5 is Polarized - 6 Transparent & opaque.

7 W<sup>th</sup> thro' denser med bends tow perpen

& vice versa - 8<sup>th</sup> Infl is greater in propor  
a densit & elevation - 9<sup>th</sup> Decomposed

into 7 rays - 10<sup>th</sup> They differ in deg - vibrat

11<sup>th</sup> 12<sup>th</sup> Differ col def an  
union of dif rays - 13 Heating power is

different inversely as refrangit - 14 Refr

oxyge - 14 This is greater in prop a dist

a red rays, fr a violent, 15 Is 1<sup>st</sup> 1<sup>st</sup> 1<sup>st</sup>

absorbed a light, but not so - Dyes



Shells never emit any other than yellow light & denies the power of absorbing light & also that it exists in latent state -

2<sup>nd</sup> Caloric - material, Coxe thinks best.

Properties - 1<sup>st</sup> The Parts repel each other

2<sup>nd</sup> It is attracted by all bodies - & paper for 1/2

most bad matter of - 3<sup>rd</sup> Polished surface says it more than rough surfaces & is said best.

4 Radiated surfaces are admitted light more than opaque - Thus bright inf & is less hot - so readily - Polished furnaces is best.

5 Radiated Caloric as quick as light -

6 It conducts diff in diff bodies -

7 Temperature is that it will ex. temp of h<sup>2</sup> O<sup>2</sup>

8 Expands all bodies - Water except -

9 Bodies expand fast & at all temperatures & diff also in deg of part expansion - gas in

the fluids - 10<sup>th</sup> The change occurs suddenly retarded by press & increased by dim pressure -

120 Lower in Vacuum - 11<sup>th</sup> all bad solid when

deprived of Caloric - 12<sup>th</sup> Inner temper is an eff

of caloric in bodies - & when upon diff changes a rise in A cent deg - Expand

246 ice never in than  $32^{\circ}$  until all melted -  $140^{\circ}$  deg are absorbed -

13<sup>th</sup> Absolute quant of calor is unknown -  
Incandescence is an eff of Caloric -

14 Prod result of heat a body & counter acts cohesion, from vol -

15 Abstr of caloric prod dim volume -  
cold re - When dim of temp is  $12.5$  or  $30$  below freezing point of Water -

16 Sources of heat - Sun, combustion, frict  
combust, percuss, Electric, structure,  
Sun & fire only

of Temp is Estim all a our bod &  
Abstr by Thermometer -

D. Gibson. Saturday - 2<sup>nd</sup> of Oct -

Caries - Decay a bony point - Spongy bones  
no little than long or cylindrical - roots & t  
& wrist foot & ankle - long bones - It is caus  
w other diseases - w Necrosis or death a bone -  
In caries preserves its vitae principle - It is  
divid into sev species - But one properly  
speaking - Caries, Blow, predisposition per  
necipary & that is Scrofula.



Symptoms - fr. obvious, sound parts & infl.  
 & discharge of pus - when open & exposed for  
 some fungus shoots out - In fungous matter  
 is whitish, when air is admitted becomes tanious  
 & fetid - Produces an incan by death parts & necro-  
 boudhood in subat a bone - when one bone is  
 affected extends to others if not arrested - I.H.  
 extracts the bone early when a wrist or  
 hand by trophines or semicircular trophines -  
 also a ankle joint & foot & condyles & humer.  
 Another remedy - to be proposed - viz cutting off  
 the ends & bones - Case of Liverpool 1811 & Moreau  
 in France - 1<sup>st</sup> Case Condyles & fem & tib & fib removed  
 got well w<sup>th</sup> stiff joint & shortened limb - Dr. Jeffery  
 invented a chain saw - Bef<sup>r</sup> w<sup>as</sup> used to remove the bone  
 in use when <sup>when a wrist</sup> removed - Lueran Cordic to destroy  
 the bones & proc death - Fastrie joins sent careful  
 in softening & bringing away the bones - But in 9  
 cases & 10 in rem. the bone by trophine -  
Exostosis - to be divid<sup>d</sup> acc<sup>r</sup> & constat dis. into  
 Acute & other - gen<sup>l</sup> & cylindrical bones - but  
 resembles fungous hematomas - When better the

248 Perosteum of Bone - not so dangerous -  
pen a thigh. Vide A Cooper's Surgical Cases.  
Sent spines project from the bones - unit of  
tumors - Case Every bone a part in subject  
a disease - When pus discharges cavity excised by Rhoads.  
Same exostosis attacks also the lower femur -  
Tropulous part in liable - sent once or as fronts  
extend a brain & kills the part - Where the surface  
a bone only aff to be diseased operation is sent  
successful - Hey's saw is best flattened - Perfor  
or a Shephard is sent successful - Mr. Macken-  
h invented a new saw - or a handle revolving -  
very fast, cuts quick - When tumor gets  
mole, sent if large or cancellated structure  
sent fatal - No A. Cooper - & succeeded - but Cooper  
A Cooper has ascertained that by slitting open  
the muscles & dividing periosteum he has suc-  
ceeded since operation.

Osteo-sarcoma - from ariside after the  
operation - Case - Yng patient - tumor suddenly  
arose for jumping, large & marble, grew in  
in few months very large - found tumor a fib.  
ula - removed from femur - Amputated.



+ found two tumors - The whole femur or <sup>249</sup>  
converted into morbid mass - cheesy mass - & spic-  
ule of bone - resemble hoary vegetation - femur -

2<sup>d</sup> Case - Tumor on ribs & resembled men - Dissects  
the tumor on the ribs - Successful - 6 mo after -  
or died of Phthisis Pulmonalis. 1<sup>st</sup> Case died of  
Phthisis & lungs - few tumor in this way -

3<sup>d</sup> Case - Spinous process - Back - operated & had  
to leave son & ribs diseased - It is a Cons titutional  
at dis turn to cancer, fang hem at, or said for -  
Can not be cured except by amput & then  
attacks the constitution -

Spina Ventosa - rare - few occur the extren-  
- long bones - as Humerus & elbow - Dis consists  
in absorption of the cells & bone - but becomes  
extremely large - size a goose egg globe - Shell is found  
in the perosteum & resembles the cranium -

Amputation the only rem - & th is liable to recur  
Case - Lower Jaw - had existed for 2 or 3 years - the tumor  
parts increased rapidly - tried inject & cavity - bone  
no use whatever - introd a probe & penetrated the  
inner membrane & tumor; granulations formed  
& got well -

**Necrosis** - most frequent - arises to mortification.  
 Bones most exposed, most liable to it - H. fracture,  
 thigh bone - <sup>Calc.</sup> abscess formed over the bone, rough  
 & scabrous - operates & get well - The only bone  
 is destroyed & new bone forms round it -  
 survives from externally - Causes - Blows, or  
 Scrophulous Predisposition - can be removed by  
 Nature, not held necessary - When suffering as  
 proof we operate to relieve H. put - not necessary  
 we make an incision down a bone & outside  
 a thigh - Apply the trephine & Key's saw -  
 Care laid bare & under a Tabia - I sent some  
 time in opening - The new one in violence.  
 No local remedies useful.

L<sup>d</sup> Have Monday Jan<sup>y</sup> 7<sup>th</sup> 1820.

Chlorides differ merely from the muriates in the place of  
 the oxygen either in the metal or chlorine -  
 of Nitro-muriatic acid or Aqua-regia -  
 Proportions not fixed - Nitric acid sh<sup>d</sup>. not be in  
 greater ratio than that of equality or less than 1/2  
 on mixing them much vapour escapes, what  
 is assumed to be chlorine - & hence we can



explain its dissolving gold - Chlorine is in 251  
solution - Rubric Chlorine does a metal &  
hydrogen & oxygen & Nitric acid forming water.

In this respect Nitric acid resists oxygen  
Manganese & Lead - The correctness of this is proven  
by procuring nitrates & muriates when this  
acid is saturated - There is no Nitro-muriates.

Phosphorus - Excites a long time great attention  
on a project of burning at such low temp.  
It is first obt<sup>d</sup> a Salt of Urine, but after a  
cent of bones - or Phosphate of lime - adding  
Sulph and liberates the Phosph acid in state  
retains a little lime, rather forming an acidul  
Phosph of lime than pure Phosph acid. To obt it  
for this is to deice & ignite it, which red it  
to glass - This when exposed to charcoal yields  
pure phosphorous ash or to subseq distilled -  
May be obtained for Salts of Urine by Nitrate of  
Lead & off the precipitate to charcoal to heat -  
The Phosphates of alkali & earths, & in decomp<sup>d</sup>  
by Charcoal, metals, are - Phosphorus has light  
straw colour? soft, cuts like wax, & cuts w a knife  
Melts at about Blood heat & emits fumes in

252 attemp air - luminous & dark - Corrodes  
the skin & produces a very angry sore - Its efflu-  
It fuses in rain water & is b cast into moulds.

It forms 3 different acids & 3 diff prop of oxy  
Phosphoric acid is m important fr its union  
w bone - It fuses into glass by heat - singular prop  
considering its elements are gaseous. It never  
found separate from its attraction for other subst  
& few lime - forming Phosph of lime -

Exp. Rubbing a sulphur match upon Phosphorus -  
Sulfur These two bodies seem to support each  
other in combustion - & sometimes explosion takes  
place, This some have attrib to water being  
decomp but Hare says <sup>it</sup> is produced nine  
water - Comb of Sulph & Phosph exc inflam.  
Like Sulphur, Phosphorus comb w Hydrogen from  
Phosphuretted Hyd m is exc infl & air - Antic  
Phosphorus is soluble in ether & oils. & renders  
them luminous - This luminousness is less in  
oxygen gas than in a mixture of Nitrogen & oxyg.  
Cotton dipped in solution & dried ignites spontan.  
Phosphuretted Hydrogen is formed by exp Phosph  
& caustic Potash in water to heat - Antic



2. the most inflamed subset in maturation

253

Dr. Gibson Tuesday Jan'y 18<sup>th</sup> 1820

Diseases of the Eyes. vide trace.

1<sup>st</sup> Encysted tumors of the eyelids. you see H. under scalp  
& lid - contained in a bag & found as in or a solid.

but chasy - never attain very large size - few rings  
a Pen - but very large as M. lent. When a orbic  
ulna muscle has been layer? not dangerous & easily  
removed - irritates the eye by compressions - may  
eventually displace the eye & destroy sight.

Treatment - Sh<sup>d</sup> be removed. Operat. clear it lid &  
insert it - must open the sac but defect round  
the tumor - dissect or destroy & clip off or scif  
on a forceps - rarely oper. sh<sup>d</sup> be performed -

When a orbic muscle it is best in an incision  
a outside a direction a fibres a orbic muscle -  
After or prev inflam.

Miliary Tubercle - see the tubercle & not so  
dangerous. Is troublesome & sh<sup>d</sup> be seen w<sup>th</sup> Lunar  
Caustic -

Hordeolum - a sty - see the tarsus glands -

It can be called meibom. but it Meibom. glands.

It is diffie to rid suppuration - the subset is disa

25-4 cellular membrane - When inflammation is  
driven Eructics &c - Exsipation sh<sup>d</sup> not be  
resorted to - When stationary warm poultice is  
best - When not successful Lunar Caustic best.  
Nitric or Muratic acids to be used - Dilute Chlorine  
Trichiasis or Entropion - Found to some  
countries. 2 or 3 Species - 1<sup>st</sup> the Tarsus is not  
inverted 2<sup>nd</sup> Tarsus itself is inverted 3<sup>rd</sup> Distich-  
iasis & owing to most quantity of hair. 2<sup>nd</sup> former  
is frequent - Inflamm is paid & sight is to destr.  
Causes. either fr Elongation & Tarsus - or relax  
of orbis Tarsus. But in 9 cases & 10 - it is owing  
to thickening of lining membrane & after inflamm.  
Crawford 1<sup>st</sup> ascertained this cause - Tarsus the  
edge & Tarsus inwards & irrit the eye. Waxe  
says the relaxation & muscle is the cause & re-  
contracting the lid to prod contraction - not  
used now. In some cases the lashes are pulled  
out, but not effectual as they grow again -  
In some cases short hairs irrit the eye - When  
inverted may not hold up the lid by adhesive  
plaisters - Those who suppose it dis owing to elong  
of skin cut out a portion of skin. Richter -



But this is not the cause & proceeds from 255  
thickening & internal membrane.

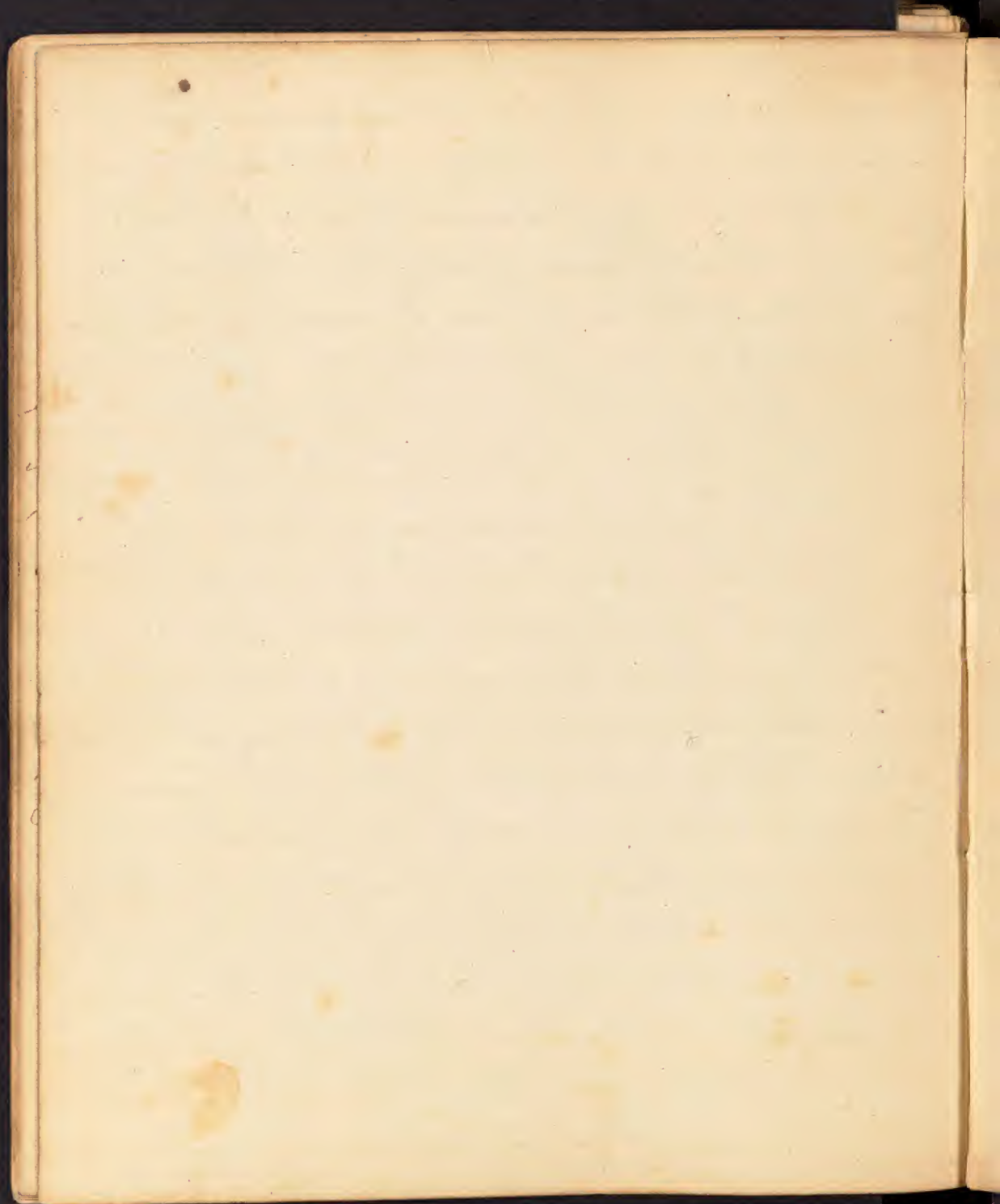
Operation - M divides the lid & inner & outer  
tarsus - & when divided puts in a hook & draw it  
out & then dissect w/ Pterygium - scissors - pen  
there is caused here & in sponge frequently.  
It is to prop to cut off the wh edge & tarsus.  
Sunderland horn & knife. cut a horn - D. Dorsey  
hook & cut off w/ scissors. Gibson doubts the prop  
of removing the tarsus as tarsus or flap over  
the eye - & on thereof 1" dissect now & living membrane  
After op - lid - pen. infl w/ cold applica be -  
retrospina - is the reverse & former & not so  
severe - internal memb being exposed is enlarged  
called Lagophthalmos. Lower lid most subject -  
upper part & lid descends on the cheeks. & Sir  
W. Edwards prop operating on for hare lip. It  
also arises fr H thickening & living membrane  
& 2<sup>nd</sup> species for adhesion & lid & cheek - in one case  
& latter it is caused by spider's bit - in this case  
dissected it away - & succeeded w/ adhesion stops. but  
some deformity still exists. Best operation is  
of band - Letter V & middle & tarsus.

256 Make the incisions w scissors -  
Close the wound w adhesive straps - & prevent  
inflammation

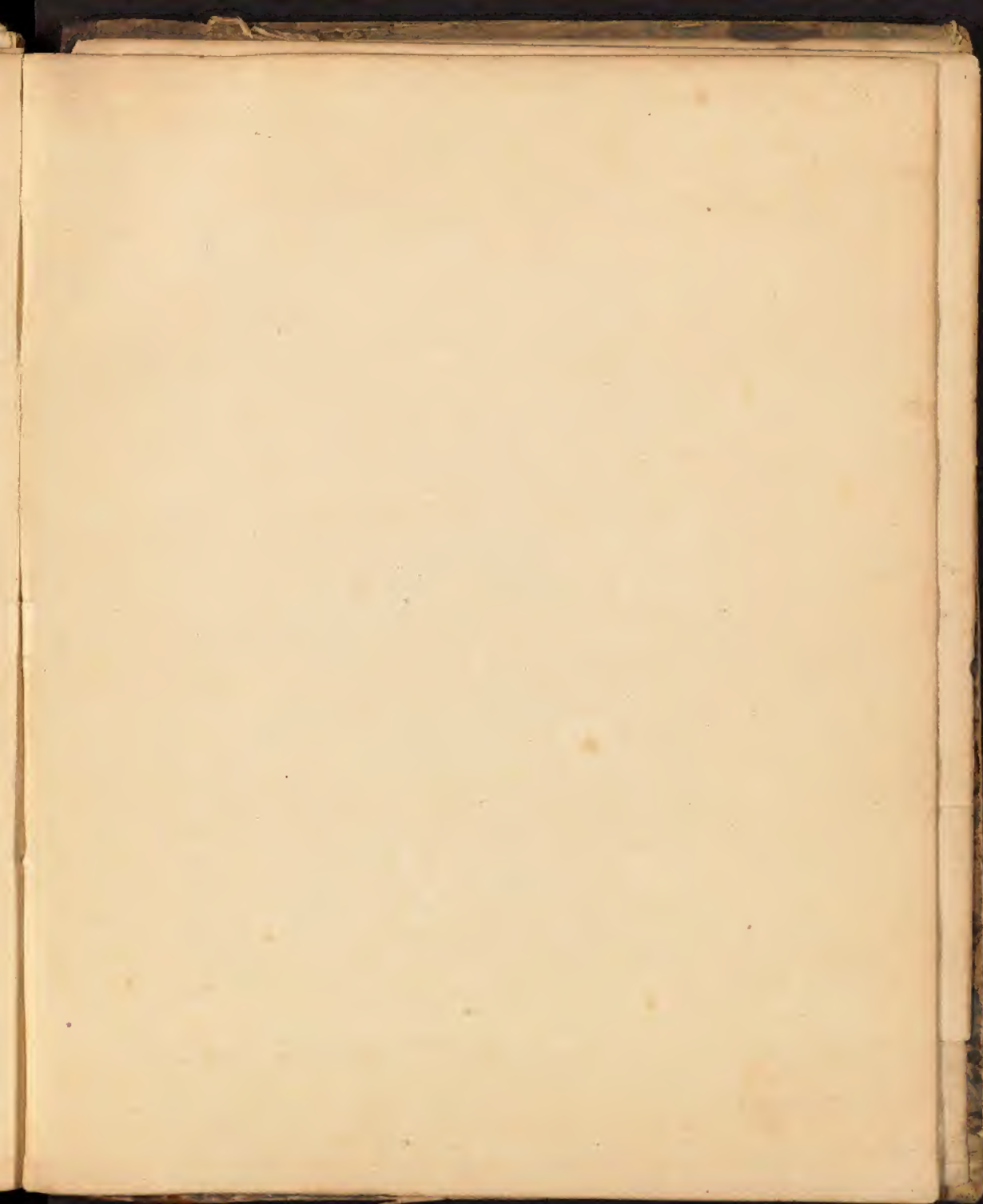
Encephalus - one of the sizes of a eye, & scabs  
a caruncle <sup>but Cancerous</sup> lachrym. in early stage it then  
is painful & inflamed & recent swallow tail.  
involves the Puncta Lachrymalia - & causes  
Epiphora or water discharge of tears - Operation draws  
it out w hook & dissect it out completely.  
w curved scissors - we cut aw the cellular <sup>of</sup> mesent  
& lining membrane - but very large - when  
cancerous it is best to extirp the eye -  
Pterygium - scabs a ball & eye, from inner  
angle & eye - triangular - about 2 - 1 on each  
side & meet in center & spread - but called  
Pannus. in early stages & dis - there is a small  
yellow spot like fat near the cornea. When  
this has existed for some time vessels extend to  
it from the caruncula & then goes on & covers  
triangular shape - aw the shape of eye.  
When a cancer resembles a speck & after  
operation this remains. The tumor is  
very vascular -



Operation - Can few be removed by forceps. Only  
remedy is excision - but occasions troublesome  
symptoms - & it is only in advanced stages that operation  
is necessary - on where the cornua is flexible,  
elevate it at the angle & direct towards the  
cornua - but on return I must repeat the  
operation -

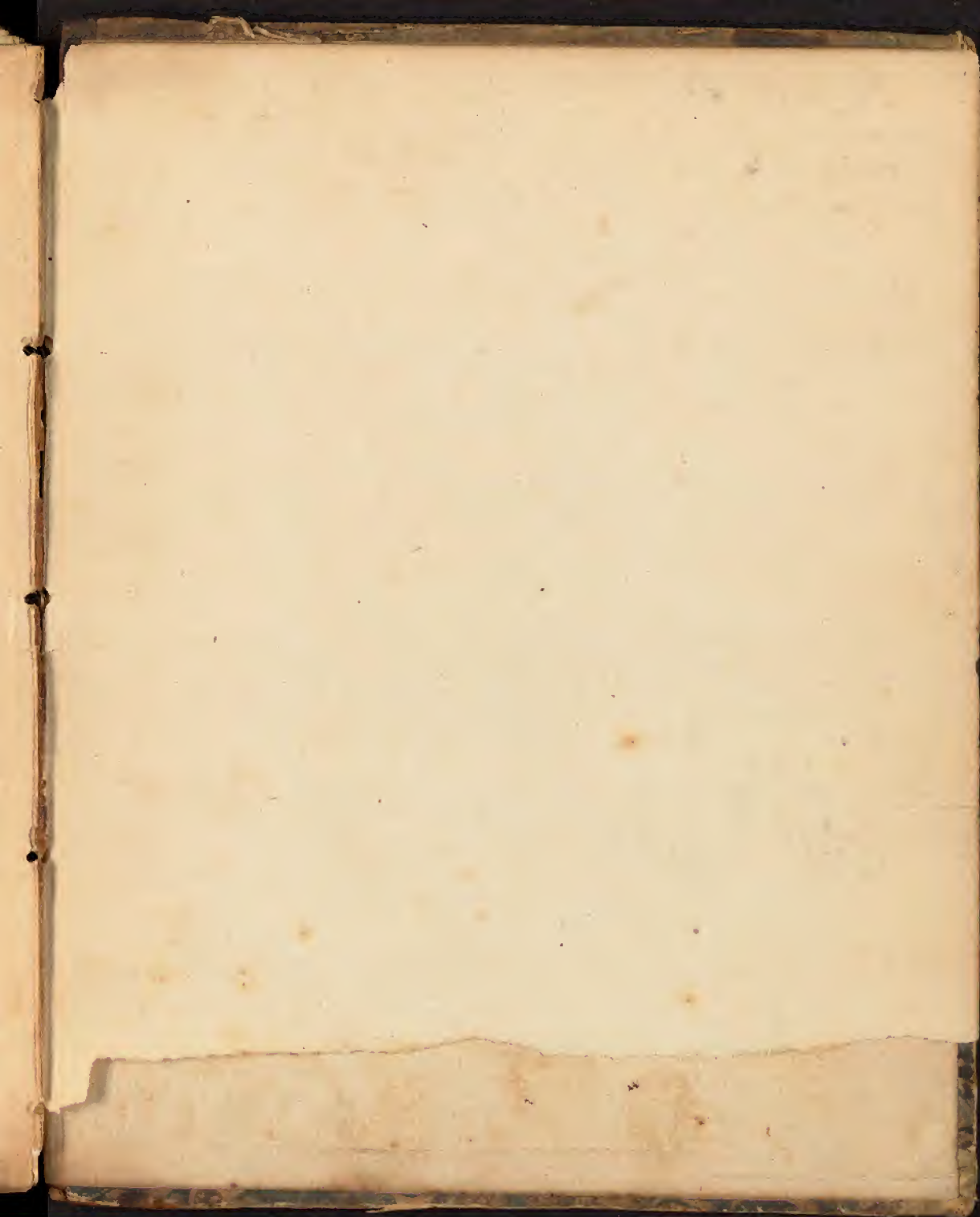




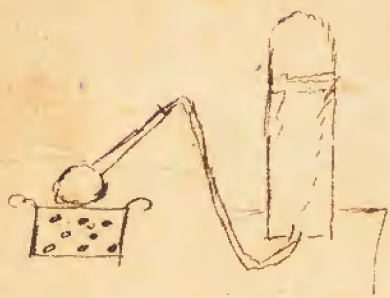


In Peter's letter he offers a unity in spirit  
more related to Capping. Pinguicula  
day, Kew's & Low shall. E. Caper's related  
I heard by Dr. Phipps -

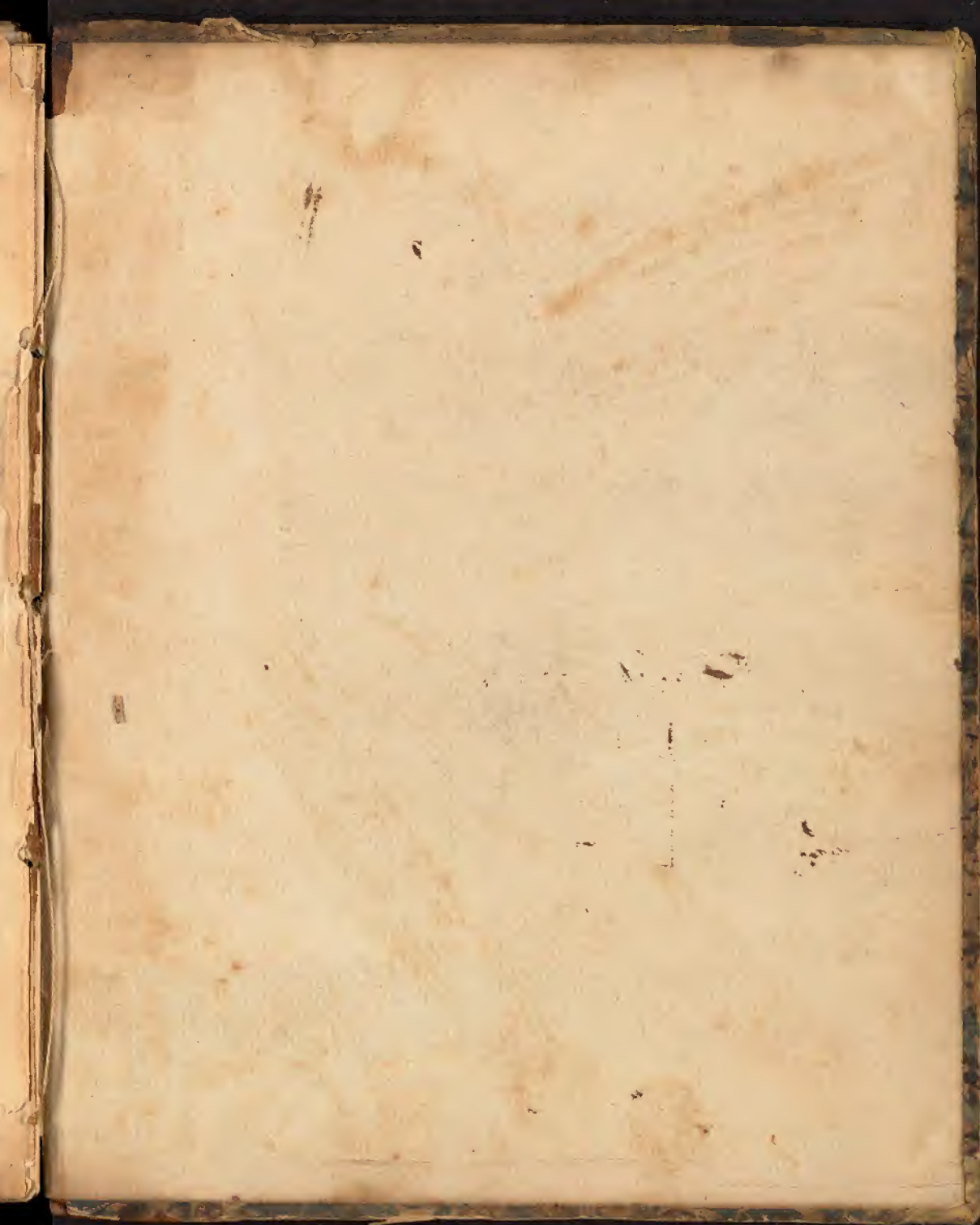




1844. Your committee have the honor to acknowledge the receipt of your letter of the 10th inst. in relation to the proposed amendment to the constitution of the State. The committee have the honor to inform you that the same has been referred to the proper authorities for their consideration. The committee have the honor to inform you that the same has been referred to the proper authorities for their consideration. The committee have the honor to inform you that the same has been referred to the proper authorities for their consideration.







Memorandum  
of  
the  
Synod  
of  
the  
Presbytery